



# MANUFACTURERS' RECORD

A WEEKLY SOUTHERN INDUSTRIAL, RAILROAD AND FINANCIAL NEWSPAPER

VOL. XLVIII. NO. 18.  
WEEKLY.

BALTIMORE, NOVEMBER 16, 1905.

\$4.00 A YEAR.  
{ SINGLE COPIES, 10 CENTS.

## Manufacturers' Record.

PUBLISHED EVERY THURSDAY BY THE  
MANUFACTURERS' RECORD PUBLISHING CO.

BALTIMORE.

RICHARD H. EDMONDS, President.  
THOMAS P. GRASTY, Vice-President.  
FRANK GOULD, Secretary.  
VICTOR H. POWER, Treasurer.

RICHARD H. EDMONDS,  
Editor and General Manager.

THOMAS P. GRASTY,  
General Staff Correspondent.

Branch Offices:  
New York—52 Broadway.  
Boston—170 Summer Street.

Subscription. . . . . \$4 a year  
(payable in advance) to United States,  
Canada, Mexico, Cuba, Porto Rico, Hawaii  
and the Philippines.  
To Foreign Countries in the Postal Union,  
\$6.50 a year.

BALTIMORE, NOVEMBER 16, 1905.

### WHAT OTHERS ARE SAYING.

Not a day passes without the receipt of letters of hearty commendation of the work of the MANUFACTURERS' RECORD in behalf of the South. These letters come from all classes of thinking people South and North alike, and though we cannot always find space for their publication, they are none the less appreciated. Among letters of this class received within the last day or two are the following:

A. J. Gahagan, treasurer, the Loomis & Hart Manufacturing Co., planing mill and building material, Chattanooga, Tenn.:

The general information given in the MANUFACTURERS' RECORD, so far as I am able to judge, pertaining to Southern industries, development, progress, etc., is about the most accurate and carefully-prepared that can be found anywhere. Your editorials commend themselves to those interested in Southern affairs. Very clearly this is the section of the country where the greatest development must be made during the next few years. The trade for nearly all Southern goods, as well as agricultural products, is increasing every year. The South is producing nearer what is required of agricultural products to supply her own people each year. Every dollar's worth of this character of supplies that is now raised at home, instead of sending money away for it, is that much saved for this section of the country. Her manufactured products are constantly becoming more in demand. The trade journals whose columns are most largely devoted to Southern interests are surely doing a great work in laying Southern possibilities before investors and manufacturers. In this respect I think the MANUFACTURERS' RECORD leads all others.

J. I. Blount of J. I. Blount & Co., successors to the Birmingham Equipment Co., machinery dealers, Birmingham, Ala.:

Every Southern man who wishes to keep in touch with the progress of the South and with the views of the thinking people in regard to economic questions pertaining to the South will find that the MANUFACTURERS' RECORD is an exceptionally good medium through which this information can be obtained.

We consider this publication exceedingly valuable to business men because of the fact of its concise statements, which convey to the mind of the reader just the information he desires.

As sales agents, who find it necessary to follow up the construction of the various plants throughout the South, we know of no medium through which we can be kept in touch with these numerous enterprises which is of more value than the MANUFACTURERS' RECORD. We consider its *Daily Bulletin* of much worth to every manufacturer who has depended upon the public for a market for his products.

As an advertising medium we think that extracts from letters written to one of the manufacturers whom we represent will express to you our views in regard to the MANUFACTURERS' RECORD from this standpoint. In a letter written about the first of this year the following statements were made:

"In reply to your favor of the 3d inst. in regard to advertising in —, wish to say that as Southern men we would like to encourage all such enterprises as — Publishing Co. in any way we can, but we are of the opinion that if you can only advertise in one paper the MANUFACTURERS' RECORD would be by far the better paper."

"For general advertising, to reach almost any industry in the South, there is no journal that will compare with the MANUFACTURERS' RECORD. There are several journals published in the South which reach a great portion of the trade, but we consider none of them as good as the MANUFACTURERS' RECORD."

In a subsequent letter written to the same people the following statements were made:

"In regard to advertising in the trade journals, we wish to advise that we believe advertising in the MANUFACTURERS' RECORD would be worth considerable, as it is by far the most popular trade journal published in the South; in fact, there is no manufacturer of any great importance who can afford not to be a subscriber to this journal."

The above expresses our views in regard to the MANUFACTURERS' RECORD, and you can use it in any way you please.

W. E. Cochran, general manager Concrete Engineering & Equipment Co., Butler, Pa.:

The first appearance of our advertisement, referring to floor-tile molding machine, in the MANUFACTURERS' RECORD has produced very gratifying results, 18 or 20 inquiries already being received, and from all parts of the country, including, besides the South, Mexico, Colorado, Minnesota, New York and other States. It is needless to say we are pleased with the quick results from our first advertisement, and that they cover such a wide territory, indicating the general circulation of your paper throughout the country.

Advertisements of Southern localities offering special advantages for the location of manufacturing enterprises will be found on pages 62, 63 and 64.

### RHODESIAN YARNS.

It was to be expected that at this season the spinning of yarns about Rhodesian cotton-growing possibilities should have its annual renewal in England, and that the news thereof should be cabled to the cotton markets in the United States. It happens, however, this year that ahead of the news there arrived in Mississippi from South Africa Mr. J. L. Stinson, one of the Southern planters who, nearly two years ago, went to Rhodesia under contract with the British Cotton-Growing Association to conduct experiments in cotton-growing. Mr. Stinson reports

through the Meridian (Miss.) *Star* that South Africa as a cotton-grower is handicapped by lack of transportation facilities and machinery, the unreliability of native labor and the unhealthiness of the climate for Europeans and Americans.

It is no wonder that two months ago the British Cotton-Growing Association was making urgent appeals to spinners, manufacturers and operatives for financial aid to prosecute its experiments, and it is no wonder that news of the wonderful possibilities of foreign cotton fields has been discounted in America.

### THE CHATTANOOGA CONFERENCE.

About a month before the assembling at Chattanooga of the Southern Conference on Immigration and Quarantine Governor W. D. Jelks of Alabama, in announcing that he had not appointed any delegates to the conference, wrote, among other things:

There have been so many conferences on immigration, and so little has come from them, that I do not look for much assistance from the Chattanooga meeting. The States need some practical working arrangement for bringing the advantages of this section to the attention of home-hunters, and I cannot see that the conference will make clearer what the need is.

So far as I know the whole business world of the possibly affected States agree that a uniform coast quarantine by the national government is imperative. I can conceive of no other way of getting a sure protection. Every representative in Congress from the Gulf States will agree on this position, and I doubt not will give the matter due attention without help from any conference.

At the time the MANUFACTURERS' RECORD suggested that this display of the usual good common sense of Governor Jelks would commend him to the judgment of the mass of the business men of the South and of the whole country. The conference has met, and its outcome has only reinforced the wisdom of Governor Jelks.

If anything was done by it marking a positive advance of plans for immigration to the South or strengthening the agreement of the business world as to the necessity for a uniform coast quarantine by the national government, it has not become prominent at this writing. A careful review of the proceedings fails to discover that the conference contributed anything to the furthering of the material or social interests of the country.

The gathering included in its membership of less than 300 a number of business men of the South who naturally felt obliged to be present to lend their aid to the governors of their respective States and others for the prevention of snap action that might have been reported as indicating the mind of the South. But for the conference such a loss of time by business men would not have been demanded. They are to be congratulated upon their effective work at Chattanooga, especially in thwarting an anti-immigration intent in the kernel of the conference, and, incidentally, upon having had the opportunity to enjoy the hospitality of Chat-

tanooga and to witness the many evidences of healthy prosperity in that East Tennessee city.

The sympathy of the country, however, goes out to them for the oratory that they had to endure. That was the dominant feature of the conference—and what Southern conference is lacking in that particular?—but there was so much of it that it crowded from the program, already amended before the conference met, more than one address of practical purpose. This feature of the gathering must have wearied the business men present with the whole idea of Southern conferences, while the thousands of business men of the South not present can hardly read the exposition of the conference, from inception to conclusion, published on other pages of this week's issue of the MANUFACTURERS' RECORD, without understanding thoroughly why the MANUFACTURERS' RECORD persistently opposes such gatherings.

One of the statesmen and orators of the conference in private conversation took the ground that the MANUFACTURERS' RECORD does not know the South; that it was mistaken in appealing to the South's pocket because the South is not concerned about that, and that such as he are working for posterity. Without entering into a discussion of the relative value to posterity of oratory dealing with fine-spun political theories beyond all possibility of practical application and policy that leads to the full development of the material resources of any section, it may be suggested that the statesmanship of the South which is appealing to the South's pocket, that is to say, encouraging it and working with it for its material progress, without for a moment losing sight of the noblest aspirations of the South to be fully realized only through the full enjoyment of its material potentialities, recognizes that the South has already ample resources in the way of regular organizations of standing representing the best energies of the South, and needs no haphazard conference, parliament or convention, not infrequently designed to be the tool of sinister influences and usually the forum principally for appeals to the midriff.

In conclusion it may be suggested, as a source of gratification, that the Chattanooga Conference, like every one which has preceded it in recent years, has tended to reduce the number of Southern newspapers unquestioningly accepting the advance flim-flummery of "conference" promoters and to increase the number of newspapers refusing to back up official outgivings of such gatherings. The thunder has begun to roll, even at the place of the last "conference." This is indicated by the fact that the Chattanooga *Times*, evidently seeking to justify itself with its readers, bungles into an assertion, absolutely contrary to facts, that the MANUFACTURERS' RECORD "is now trying to convince its readers that it was 'for the conference' all the time." Rumblings are coming, too, from other parts of the

South. The *Morning News* of Savannah, Ga., in its issue of November 13 says:

The question of immigration at the Chattanooga Quarantine and Immigration Convention was secondary to that of the question of quarantine. The resolutions adopted indicate that the subject wasn't given much attention. It is certain they will not have much weight with the legislatures of the several States that were represented in the convention. Each State was advised to establish an immigration bureau and to make an appropriation sufficient to maintain it. That is what every Southern State has been proposing for these many years, and some of them have established such bureaus, but without getting much result from them, however. It would have naturally been supposed that a convention called to consider, among other things, the question of immigration would have suggested something new or at least a little different. \* \* \* The Chattanooga convention may have advanced a little so far as quarantine is concerned, but it stood still in the matter of immigration.

The Richmond (Va.) *Times-Dispatch* of November 14 says:

As to the second department of its endeavors, it is impossible to escape a feeling of disappointment that the conference accomplished so little. The quarantine discussion so far pre-empted the attention of the delegates that the matter of immigration was pretty well ignored. Nothing of any practical consequence was accomplished in that direction. Resolutions were adopted, it is true, inviting to the South "all industrious and upright white persons" from other sections of the country and abroad, urging a greater stringency in our immigration laws, and recommending to every Southern State the establishment of its own immigration bureau. But this was all. No ideas or suggestions of any value appear to have been threshed out by general discussion. \* \* \* Upon this whole vital question that body had nothing weightier to say than would be suggested to any intelligent man after the most superficial consideration. \* \* \* It is only fair to remember, of course, that the Chattanooga Conference was a body without power of any sort. It could do nothing but make recommendations to State legislatures and to Congress. No doubt, too, it was too large a body and its procedures were too much after the "set" speech order to adapt it for reaching any very definite and unique results. Its failure to give the South any marked help in its rather pressing problem of securing new population is, therefore, while somewhat disappointing, not particularly surprising. Legislative committees, employers' associations or well-equipped bureaus will probably prove more fruitful of positive and advantageous results. In recommending the creation of State immigration offices the conference delegates have no doubt pointed out a simple means of attaining the light on the matter which they themselves failed to shed.

The Mobile (Ala.) *Register* of November 10, even while the conference was in session, said:

While welcoming all light possible upon this subject [quarantine], we should not make the mistake of thinking that this convention is qualified to do more than give expression to a public sentiment. It is not an assembly of experts in quarantine and sanitary science. A large number of the "delegates" are interested in immigration; very many of the others have no special knowledge of quarantine. They have been appointed by governors, by mayors and by commercial bodies, and their selection has been made rather because of their ability to pay their way to the convention than because of fitness to properly consider and wisely pass judgment upon so vital a question as federal control of what has heretofore been regarded as a State function. The only conference that would be of much value would be one participated in by a select few of experts in the science of quarantine; not a public conference, but a private one—a real conference, in fact, not a mere assembly, where set speeches are delivered and a series of resolutions in accord with a prearranged program is presented and "unanimously" adopted.

#### FOR TRADE SCHOOL.

The city of Gadsden, Ala., has agreed to give a site and to furnish the funds for the beginning of a trade school for white boys there. It is proposed to raise by popular subscription the funds for the endowment of the school, which is expected to provide training in several trades for about 500 boys free of

cost. It is just such institutions as this that the manufacturers and business men of the South should support liberally. That section already has a dozen or more institutions where the young men of the South may receive technical training for leadership in the industrial progress of the South. While these institutions are already doing excellent work, few of them have the equipment demanded by the increasing opportunities. But in the midst of the efforts to better the conditions in the agricultural and mechanical colleges, the men of the South should not lose sight of the necessity to train up the thousands of intelligent skilled mechanics for whom the South is calling, and will continue to call more lustily for many years.

#### THE MISSISSIPPI'S FERTILITY.

President Charles Scott of the Mississippi River Improvement and Levee Association, who presided at the great river convention at New Orleans two years ago, when an intelligent campaign for the improvement of waterways in the Mississippi valley was successfully started, is delighted with the prospects of a furtherance of the campaign through the references of President Roosevelt made at New Orleans to levee improvement. As Mr. Scott points out in the New Orleans *Picayune*, about two-thirds of the 19,000,000 acres of alluvial lands in the Mississippi valley, large areas of which are still covered by forests, will be brought under cultivation by a proper safeguarding of them from inundation of the Mississippi river. He estimates that the improvement will add as much as \$500,000,000 annually to the wealth of the country, and benefit not only Louisiana and Mississippi, but other portions of the Mississippi valley and the country as a whole. When it is considered that the reclaimed and safeguarded lands would be capable of producing a crop of cotton as great as the average one grown in this country, the importance of the improvement becomes obvious. Included in the plans for the improvement is the reclamation of what is known as the St. Francis basin, lying in Missouri and Arkansas. That area, parts of which are more or less submerged as a result of an earthquake in the early part of the last century, is the special care of the St. Francis River Improvement Association, which has already made some progress and which will ask the coming Congress to appropriate \$2,000,000 to carry out its project. A lucid exposition of the undertaking from the pen of Mr. John A. Fox, secretary of the association, appears on another page of this week's issue of the MANUFACTURERS' RECORD. He tells of the progress already made and the results for the lumber trade and for agriculture, and calculates that within 10 years after the reclamation work has been done the area would produce annually 300,000 tons for transportation.

#### RED TAPE IN CONTRACTS.

Attention is called by the Washington papers to the annual report of Paymaster-General H. T. B. Harris of the United States navy. Referring to this the *Star* says:

One of the most noteworthy features dwelt upon is the saving in time in the payment of contractors' bills, brought about by a new form of voucher and a change in the method of handling such matters. Where an average of two weeks was formerly required to pass a voucher through the several stages within the department for payment, it now takes only about four days. The paymaster-general says that as the amount paid on vouchers thus handled during the year ended

June 30 last was over \$60,000,000, it will be seen that the actual saving on that feature alone—representing the interest, at a fair legal rate, on the money invested for the 10 days' difference in time—would be quite \$100,000, which is at least one-third the total annual cost of maintenance of the bureau of supplies and accounts. It is stated that this elimination of delay will render government business more attractive and result in greater competition, and, consequently, lower prices.

If Mr. Harris succeeds in bringing about a condition in which less red tape is involved in government contracts it will be a very great advantage to the government as well as to the country. There are a good many people who by reason of this red tape refuse to bid on government work at all. One of the leading iron makers of the South, for instance, whose product would be especially valuable in government work, absolutely refuses ever to bid on anything for the United States government because of the red tape, which makes dealing with the government so unbusinesslike as compared with railroads or other great corporations. Mr. Harris is to be commended if he can make a move to break down some of this official red-tapism.

#### RECORD-BREAKING CAR CONTRACTS.

A contract recently awarded by the New York Central Railroad for 25,000 freight cars breaks the record for large railroad-equipment orders, which had lately been broken by the Pennsylvania Railroad with an order for more than 21,000 cars. This makes a total of over 46,000 cars recently ordered, while the Pennsylvania has since July 1 given contracts for over 37,000 freight cars, or for these two companies there is a total of more than 62,000 cars contracted for since the middle of the year. Estimating the cost of these cars at an average of \$1000 each shows a cost of \$62,000,000—a sum greater than the annual gross receipts of some of our great trunk lines, which will be disbursed for labor and materials during the next year.

Although other railroad companies have given large orders for equipment within the last few months, none of them have neared in magnitude either of these two contracts which were let within the narrow compass of a single week. These huge purchases of rolling stock are, moreover, especially impressive because they come immediately upon the heels of press dispatches noting a great lack of cars in iron and coal districts, a shortage so large as to very seriously hinder the movement of business and the welfare of their people. They also indicate the existence in the minds of leading railroad managers of a conviction that the present general prosperity will continue for a long time, particularly in view of the fact that the delivery of all of these recently-ordered cars by the manufacturers cannot possibly be completed until late in the next calendar year, if, indeed, they can then be finished, on account of the size of many now unfilled orders previously entered upon the books of the car-building corporations.

The mineral regions of the South as well as those of the North and West have felt the effects of this lack of cars, although its leading trunk lines are now awaiting the fulfilment of liberal orders for equipment. Yet the progress of the times is so great and the development of our mines and industries so rapid that when these cars are delivered the conditions then existent will beyond doubt demand the placing of other or-

ders to meet requirements and to avoid possible delays to business and impediments to success.

This wiping out of record after record in car-building and the setting up of new standards of accomplishment demanded by the age can be accounted for by the rapid increase of our population, together with a vastly greater consumption of all kinds of products, materials and manufactures.

#### A CONTEMPORARY ASTRAY.

In an address made early in October President Samuel Spencer of the Southern Railway, in opposing proposed federal control of the railways, said:

To place power in the hands of one tribunal which is or may be prosecutor, jury and judge, and at the same time executioner, is equivalent to providing by statute for the enforcement of commercial lynch law.

This idea was elaborated by the MANUFACTURERS' RECORD as follows:

This agitation asks the United States Supreme Court to readjust upon an artificial basis all the fundamental conceptions of English and American law. It does not leave to a wild impassioned mob the task of ending the career of Congress, but asks that body to pile around itself the fagots and apply the fatal torch, to commit constitutional suicide.

The new power created, it would be impossible to place any limits upon the threat against safely-ordered business wrapped up in the Department of Commerce and Labor, already bristling with unconstitutional and dangerous tendencies. It would be a case of commercial whitecapping added to commercial lynch law.

We further suggested that the advocates of federal control of railways "would be fierce to resent the well-grounded charge that they are engaged in a revolution against the bulwarks of decent organized society." This suggestion went straight home. It was promptly resented by one of our North Carolina contemporaries peculiarly liable to fly the track, especially, as is frequently the case, when it does not read its text, and particularly prone to embarrass the discussion of principles by seeking to bring it down to a personal basis. Now the MANUFACTURERS' RECORD might indulge in personal retort in this connection.

We might call attention to the fact that this particular North Carolina paper is not even mentioned by name here because it admitted to its columns some months ago falsehoods reflecting upon the integrity of the MANUFACTURERS' RECORD, and, as far as we know, has never made adequate reparation, in spite of the fact that its attention was promptly and kindly called to the mistake into which it had been led.

We might suggest that our offending comments upon Mr. Spencer's address were intended for intelligent persons who would hesitate to criticise until they had read, and further, that our excited critic had either not read our editorial or had forgotten all about it in framing its criticism. For it wildly accuses Mr. Spencer and the MANUFACTURERS' RECORD of indulging in epithets, when not a single epithet was employed by either, and it displays further ignorance in charging that Mr. Spencer, "having no argument that answers the Raleigh speech of Mr. Roosevelt, he turns in to seek to defeat the legislation by calling names," when, as a matter of fact, the editorial embodying Mr. Spencer's speech was printed before Mr. Roosevelt reached Raleigh and his speech had been delivered some days earlier.

But we shall not indulge in personalities, and shall content ourselves with telling our contemporary that our editorial was directed against the mob-mind, whether without law or within

law, which was manifested, for instance, a couple of years ago in the lynching in effigy of a certain North Carolina editor by the students of a so-called institution of learning in that State, an editor who had our profound sympathy.

#### FLORIDA PHOSPHATE LANDS.

Mr. Albertus Vogt of Bartow, Fla., in a letter to the MANUFACTURERS' RECORD gives some interesting facts regarding sales which he has recently made of Florida properties. He says:

"I have sold to Mr. J. Warrington Cottman of Tiger Bay P. O., Fla., who is the superintendent of the Palmetto Phosphate Co. and one of the largest, most successful and prosperous pebble phosphate miners in Florida, 426 acres of phosphate land in Polk county that by Mr. Cottman's own prospecting and analysis of the Shepard laboratory at Charleston, S. C., is the best tract in the country, for \$42,600 cash. The Palmetto Phosphate Co. is composed of Baltimore people, and maintains an office in that city.

"I have also sold for Mr. T. G. Ross of Calvert Station, Baltimore, 160 acres of land in Polk county for \$8000 cash, and I also have a deal on in fuller's-earth lands with Mr. Edgar G. Jones of 220 South Charles street, Baltimore, comprehending a cash transaction of \$124,000. The principals of all of these deals are Baltimore people, and every dollar of the money is Baltimore capital."

#### PACKING IN KENTUCKY.

Referring to the very considerable development of the hog-packing interest of Louisville, a correspondent of the MANUFACTURERS' RECORD writes:

"In what was called the old winter packers' time Louisville stood at the head as a packing center, curing millions of pounds of meat during the winter and shipping by Ohio river boats south in the summer season. There were several wealthy firms engaged in the business, but when artificial refrigeration came into general use there sprung up, especially in Chicago, a lot of what was then called summer packers, which drove the 'old-timers' out of business. Why the winter packers at Louisville did not immediately adopt the modern system is not known to me, but it seems the packing business in Louisville steadily declined until several years ago, when Mr. John Cudahy of Chicago bought and modernized one of the old winter houses and has since killed as many as 384,000 hogs in one year, an average, say, of 300,000.

"The Kentucky Packing & Provision Co. last year built a modern packing-house at the Central Stockyards, and is packing at the rate of about 150,000 to 200,000 hogs annually, finding the business improving right along.

"There are other packing-houses here, namely, Vissman & Co., L. P. Bornwasser & Co. and Pfaffinger & Co., but their business is principally local. However, they are doing quite a large business and packing at least 200,000 hogs between them.

"The Kentucky Packing & Provision Co. is doing principally an export business, shipping from five to eight cars per week to Liverpool, England.

"The hogs of this section are especially adapted to the English trade, being lean and firm, while the Western hog is very fat and gross. The consumers in this country have also commenced to demand light, lean bacon and hams, and the light fresh pork cuts are preferable; so, from a Louisville standpoint, we have a wonderful chance for increase; besides, the receipts of hogs are increasing rapidly and the Eastern packers are taking a large per cent. of them, paying high freight rates.

"The only thing that I can see lacking in making Louisville a prominent packing point is capital—and it certainly takes a great deal of money to successfully operate a packing plant of reasonable capacity."

The development of ice-making and refrigeration makes it possible for the packing business to be carried on summer and winter alike throughout the South, and there are other points as well as Louisville in which the packing business could be handled to great advantage.

#### SOUTHERN STEEL.

Southern pig-iron long ago invaded and captured to the extent of its output the iron market of much of the East and West. Now Southern steel is beginning the same movement. The National Steel & Wire Co., with general offices at Nos. 114-116 Liberty street, New York, and owning a number of large steel and wire plants at different points, making a wide range of wire rope, telephone and telegraph wires and many special lines of wire goods, has just purchased several thousand tons of steel in the Birmingham district. This steel will be shipped to the National Steel & Wire Co.'s mills at New Haven, Conn., to be turned into the finer finished product for which that company is so well known. But why ship steel to wire works in Connecticut? Why not turn it into finished product at home? The logic of events will soon answer this.

#### JOURNALISTIC.

Indicative of the activity in material affairs at Greenville, S. C., is the announcement that Messrs. D. A. Tompkins and J. P. Caldwell, owners of the Charlotte (N. C.) *Observer*, have bought a controlling interest in the Greenville News Company, of which Mr. Caldwell has been elected president. The company operates in Greenville the *Daily News*, one of the best morning papers of the South; the *Semi-Weekly News* and a job office. The great success attained by the Charlotte *Observer* under the ownership of Messrs. Tompkins and Caldwell is a guarantee that their interest in the Greenville *News* will mean an improvement in the journalism of the Piedmont South.

#### TO ADVANCE TEXAS.

The Secretaries' Association of Commercial Organizations of Texas has been formed with Messrs. Homer D. Wade of Waco, president; J. S. Burney of Austin, W. S. Potter of Texas and Walt Smith of Cisco, vice-presidents; W. B. Carnes of Denison, secretary; Marshall Smith of Brownwood, treasurer, and H. G. Spaulding of Beaumont, J. A. Ewton of Dallas, Frank Morris of Palestine, P. H. Tansy of Corpus Christi and W. H. Minns of Laredo, additional members of the executive board.

The organization is designed to insure co-operation of the business bodies of the State in the advancement of Texas.

#### THE COTTON MOVEMENT.

In his report for November 10 Col. Henry G. Hester, secretary of the New Orleans Cotton Exchange, shows that the amount of cotton brought into sight during 71 days of the present season was 4,005,656 bales, a decrease under the same period last year of 562,548 bales; the exports were 1,789,544 bales, a decrease of 458,978 bales; the takings were, by Northern spinners, 500,423 bales, a decrease of 25,872; by Southern spinners, 534,793 bales, an increase of 25,388 bales.

It is announced that the Lackawanna Railway Co. has awarded the Newport News (Va.) Shipbuilding & Dry-Dock Co. contract for a ferryboat about 250 feet long and practically a duplicate of four other steamers recently completed by the Newport News Company.

## Atlanta—Southern Industrial Exposition—1910.

As soon as announcement was made of plans for an industrial exposition of the South at Atlanta in 1910 the MANUFACTURERS' RECORD wired as follows to Mr. Clark Howell, editor of the Atlanta *Constitution*:

Baltimore, Md., November 9, 1905.

Mr. Clark Howell,

Editor of the *Constitution*,

Atlanta, Ga.:

The MANUFACTURERS' RECORD congratulates the South that Atlanta, with that remarkable intuition which throughout its whole history has enabled it to do the right thing at the right time, plans to hold a Southern exposition in 1910. The very suggestion of such a plan should stimulate not only the people of Atlanta, but the people of the entire South to an appreciation of the magnificent opportunity which such an exposition will present in giving to the entire country the opportunity of focalizing in Atlanta, five years hence, world-wide interest in the material advancement of the South.

Nearly a quarter of a century has passed since Atlanta's first great exposition awakened the people of the country to the possibilities of the South, and all, and more than all, that exposition forecasted has already been fulfilled. The South at the time, just rousing itself to a new effort, has this time for the battlefield, but in a contest for world supremacy in industrial and general commercial advancement, scarcely realized the inherent strength of its own position; but, taking up the work of the old South in industrial and railroad development so rudely interrupted by the shock of war and the curse of reconstruction days, it has pressed forward until it is no longer a question whether the South can compete in cotton with New England manufacturing, nor whether it can compete with Pennsylvania in iron and steel, but it is a serious question whether New England, with all of its vast wealth, can continue to compete with the South in cotton-manufacturing, and whether Pennsylvania, hauling its ores 1000 miles from Lake Superior to meet the coke at Pittsburgh, can continue to dominate the world's steel industry in competition with the South, where the coal and the ore are found in such close juxtaposition.

#### South's Victory Is Great.

The victory which the South has won during the last 25 years is well worthy of such a celebration as an exposition in 1910 would afford. Not only would it be a fitting time to celebrate what has been accomplished, but it would (as Atlanta's other expositions have proven) be a tremendous stimulant to the South to go forward and do still more.

When Atlanta's first great exposition was held the entire South had \$21,000,000 invested in cotton-manufacturing;

today the South has \$225,000,000 in cotton mills. At that time the South was making less than 400,000 tons of pig-iron a year; now the South is making nearly 3,500,000 tons, or nearly as much as the United States was making at the time of that exposition. In 1880 the entire country mined of bituminous coal 42,000,000 tons; the South is now mining at the rate of 70,000,000 tons, or nearly 75 per cent. more than the entire United States mined 25 years ago. The total value of the farm products of the South, which in 1880 aggregated \$630,000,000, is now \$1,750,000,000, and the capital invested in manufacturing, which at that time was \$257,000,000, is now over \$1,500,000,000.

But these figures, great as they are, only tell the beginning of the story. We have scarcely commenced the material up-

building of the South. Though the assessed value of property has increased from \$3,000,000,000 in 1880 to \$6,500,000,000, this is not one-half so valuable, so far as the future development of the South is concerned, as the experience gained, the strength and self-reliance developed by what we have accomplished, the solution of the many hard problems which the South faced 25 years ago.

#### South Was Unknown.

Then the world knew comparatively little about the South, and what it did know was colored by the wild sensationalism of political enemies and of many unfriendly newspapers. Today, not only in this country from the Atlantic to the Pacific, but throughout Europe, it is recognized that the South is the coming center of the world's greatest activity.

Here is to be "the coming El Dorado of American adventure." It is entirely within reason to say that within the next five years and before the Atlanta Exposition shall be opened—for it may be accepted that Atlanta, having put its hand to the plow and projected this exposition, will not now turn back, but that, as in the past, it will carry forward to pre-eminent success an undertaking worthy of the country, worthy of the South, and around which the business interests of the entire country can justly rally—the advancement of the South will be far greater than all that has been accomplished in the last 15 years. What we have done in 15 years in material upbuilding, in the accumulation of wealth, in the development of coal and iron properties, in the utilization of our unlimited water-powers, will now be duplicated within five years. From Wheeling, W. Va., to El Paso, Texas; from the high mountains of Western Carolina to the Gulf, there is a wide sweep of business activity, of increasing prosperity of life and enthusiasm. In all that broad section is heard what has been "the aptly-termed music of progress, the whirr of the spindle, the buzz of the saw, the throb of the locomotive and the roar of the furnace." The possibilities of the future are practically without limit. It is true that we are making nearly as much iron and mining more coal than the United States made of the one and mined of the other 25 years ago, but so vast are the resources of the South in coal and iron that this section can continue the profitable development of mining and of iron and steel making to the point where we shall produce far more than the entire country now produces.

#### MILL CAPITAL INCREASED.

It is true we have increased the capital invested in cotton mills from \$21,000,000 to \$225,000,000, and that we have now 9,000,000 spindles, against 600,000 spindles 25 years ago, but we are still furnishing three-fourths of the raw material for the 110,000,000 spindles which are operating in the world. Our cotton crop, averaging \$600,000,000 in value when sold by the Southern farmers, is worth largely over \$2,000,000,000 in the finished product before it reaches the consumer. If we would measure something of the limitless possibilities of the future, it should be remembered that in the great territory which stretches from the Potomac to the Rio Grande, bordered on one side by a mountain range bursting with mineral wealth and on the other side by the Atlantic and the Gulf, there are many times as much coal and as much iron as all Europe possesses; that in this same region stands one-half of the timber of the United States; that here is found the richest oil territory known in America; that here centers a monopoly of the

world's cotton production and the predestined center of cotton-manufacturing as well; here are found wheat and corn and rice and sugar; here fruits of all varieties find their most perfect development; here is found a uniform rainfall, with a climate ranging from the cold of the high mountains of Virginia and Carolina to the warmth of the far South. It is in this favored region that the highest activities known to the human race are to find their greatest opportunity and reap their most abundant financial rewards.

"Mr. Edmonds emphasizes what previous expositions have accomplished for Atlanta, Georgia and the South, and says of the one now in contemplation: 'Not only would it be a fitting time to celebrate what has been accomplished, but it would (as Atlanta's other expositions have proven) be a tremendous stimulant to the South to go forward and do still more.'

RICHARD H. EDMONDS,  
Editor and General Manager  
*Manufacturers' Record.*

Referring to this letter the *Constitution* says:

"When the Greater South shall have come into its own; when it shall have become the premier industrial section of the nation; when it shall have passed its matchless opportunities through the clearing-house of hard work and intelligent initiative in exchange for tangible assets that will make new history in American industry, Richard H. Edmonds, editor of the *MANUFACTURERS' RECORD*, will be, pre-eminently, one of the men to whom it will turn in substantial gratitude for his vital share in hastening the day of its dominion. Mr. Edmonds, through his Baltimore publication, has probably done more than any single factor to keep the advantages of the South before the eyes of the potent commercial interests of the country.

"He knows his subject with a practical intimacy born of long and discerning study. Southern potentialities, from the Potomac to the Rio Grande, are as familiar to him as the letters of the alphabet.

His arguments and his statements are born of no perfunctory generalizations; they bristle with cold figures, dovetail in logic that is the product of clear and farseeing judgment and go forth clothed in the calm enthusiasm of the man who is sure of his ground to the very last inch.

"We have stressed Mr. Edmonds' personality that our readers may attach the proper importance to the forceful article in yesterday's *Constitution*, in which he congratulates Atlanta on the projected exposition in 1910, vividly summarizes Southern prospects and progress, and joins his faith to the movement with a subscription of \$1000.

"His rapid sketching of the South's marvelous strides in the last 25 years is worthy the keen attention of our readers. His outlining of its wonderful future is so temperate, so true and yet so inspiring that we feel the men in charge of this movement will profit from a second perusal. Here it is:

"If we would measure something of the limitless possibilities of the future it should be remembered that in the great territory which stretches from the Potomac to the Rio Grande, bordered on one side by a mountain range bursting with mineral wealth and on the other side by the Atlantic and the Gulf, there are many times as much coal and as much iron as all Europe possesses; that in this same region stands one-half of the timber of the United States; that here is found the richest oil territory known in America; that here centers a monopoly of the world's cotton production and the predestined center of cotton manufacturing as well; here are found wheat and corn and rice and sugar; here fruits of all varieties find their most perfect development; here is found a uniform rainfall,

with a climate ranging from the cold on the high mountains of Virginia and Carolina to the warmth of the far South. It is in this favored region that the mightiest activities known to the human race are to find their greatest opportunity and reap their most abundant financial rewards.

"Mr. Edmonds emphasizes what previous expositions have accomplished for Atlanta, Georgia and the South, and says of the one now in contemplation: 'Not only would it be a fitting time to celebrate what has been accomplished, but it would (as Atlanta's other expositions have proven) be a tremendous stimulant to the South to go forward and do still more.'

"Mr. Edmonds has never lent his personal approval and the support of his publication to any project, large or small, until he had subjected it to a keen analysis, which comprehends its motives, its chances of success and its probable outcome. His unqualified approbation of Atlanta's exposition, expressed in substantial form, should be an encouragement and an inspiration to the men who, as he says, 'have now set their hands to the plow.'

"The indications from all Georgia and every other Southern State are such as to add strength to his statements. Never in her history has Georgia been more obviously prosperous. Eleven-cent cotton has cast its tangible magic into every vein of our commercial and industrial fabric. A single instance of its benign force is seen in the net profits of the State's farm, lifted in one year from \$2000 to \$24,000. Our State banks, the vanguard of universal prosperity, have in four years multiplied at a ratio that establishes new Southern records. The genius of development is seen in each one of the myriad resources of this State.

"What is true of Georgia is true in equal degree of the entire South. Its factories, its mines, its forests and its plantations are pouring into our cities a tide of wealth that means happiness and commercial expansion for every community thrifty enough to urge on its forward flow. If ever the psychological moment for action comes to any section, it faces this section now. But we want no futile and stupendous display, covering many acres to no profit, and gilded by no single overshadowing aim.

"What we do want is an industrial exposition; one which shall mirror the South's almost incredible progress; one which shall set forth to our gaze, no less than to that of the distant visitor and capitalist, her opportunities and her scope for the future; one which shall accomplish these things in a compact, practical and convincing manner.

"To that end let us make haste slowly, but surely, with an intelligent perception of our final purpose and a resolution to work toward it without let or hindrance."

#### QUARANTINE AND IMMIGRATION.

##### Results of the Conference at Chattanooga.

[Special Cor. Manufacturers' Record.]  
Chattanooga, Tenn., November 10.

After a two days' session the Conference on Immigration and Quarantine came to an end this afternoon with a luncheon at Fort Oglethorpe and a drive over the battlegrounds of Chickamauga and Missionary Ridge. Incidentally, the drive afforded a bird's-eye view of numerous factories, in the upbuilding of which Chattanooga has made notable progress in recent years.

Yesterday's proceedings consisted of addresses of welcome, responses and other floods of oratory, and the appointment of committees, including one to draft resolutions on immigration and another on quar-

antine. Today there were further addresses, the reports of committees and the adoption of resolutions which had been threshed out in committee, and then came the entertainment feature of the occasion, which included a review of the Twelfth United States Cavalry Regiment, not long back from the Philippines.

In attendance on the conference were about 275 delegates and others, including seven governors of Southern States, two United States senators, and sprinkling of congressmen, representatives of commercial organizations, railway passenger agents representing Southern railway and steamship companies, health officers, local and national, newspaper correspondents and others. Louisiana sent 60 delegates, who included Governor Blanchard and a number of the leading business men of New Orleans and the State; Mississippi, Alabama and Georgia each had 20 to 25 delegates, and there were one or two more delegates from all other Southern States excepting Texas, which declined to be represented.

The net result of the conference deliberations was the adoption of resolutions favoring national control of maritime and interstate quarantine. The recommendations are in line with what national and State authorities are agreed on as altogether desirable, and such as are covered by measures which have already been drawn up for introduction at the next Congress.

The immigration resolutions denounced as slanderous and untrue all reports that the South is unfavorable to honest and industrious white immigrants, and extended greetings and assurances of welcome to all such immigrants, coming from where they may—any of the European countries as well as from all sections of the United States. State immigration bureaus were also recommended.

This is at wide variance with some of the opinions expressed on the convention floor and disseminated by sponsors and endorsers of the conference, to the effect that "the South wants no more of the low-browed Italian;" that measures must be taken to restrict immigration to the South, and that "the purpose of this convention will be primarily to consider the advisability of more stringent legislation in the matter of the admission of foreign immigrants to Southern ports."

The work of the *MANUFACTURERS' RECORD* in calling public attention to the great harm that would be done the South by any convention indorsement of this attitude toward immigration very evidently carried the conference from its original moorings and prevented action that would have misrepresented the interests of those who are engaged in the work of developing and upbuilding this section.

ALBERT PHENIS.

#### TO IMPROVE TENNESSEE RIVER.

##### The Association to Memorialize Congress.

[Special Cor. Manufacturers' Record.]  
Chattanooga, Tenn., November 11.

The ninth annual convention of the Tennessee River Improvement Association was held in the Auditorium at Chattanooga today. An interesting and instructive program of speechmaking was carried out. Resolutions and a memorial to Congress were adopted. The officers of the preceding year were re-elected, and Sheffield, Ala., was selected as the next meeting-place for the association.

The resolutions heartily endorsed the movement to unify the work of river and harbor improvement, and directed the President to appoint delegates to the river improvement convention to be held in Washington January 15, and also to the

meeting of the Ohio River Association at Cairo.

It was recommended that the amount of money carried by the river and harbor bills should be in the future not less than five times as great as it has ever before been. The object of these meetings being largely educational, an appeal was made to the press and the people of the nation for an active and extended interest in internal improvements. The memorial to Congress recited the importance of river improvement in view of the unprecedented increase in commerce which is now overtaxing the transportation facilities of the country, and asked a careful consideration of the needed improvements of the Tennessee river above Chattanooga and to its tributaries. Specific mention was made of the streams and the amounts which would be required for their improvement, so as to make them available for the moving of coal, mineral and other products of the section.

#### SOUTHERN LABOR NEEDS.

The following letters, additional to those published in our last issue, illustrate the pressing need of labor in the South:

Frank H. Lewis, president Pascagoula Commercial Club, Scranton (port of Pascagoula), Miss.:

In the vicinity of the port of Pascagoula, which embraces the communities of Pascagoula, Scranton and Moss Point, 300 to 400 saw-mill hands, including the handlers of the lumber, sawyers, foremen, engineers and mechanics, would be promptly employed. The hands now used are mostly negroes, who are unreliable, shiftless and irregular, and there is not enough white labor available to meet the needs of the mills. Wages run from \$1.25 to \$5 per day, the former price for common labor and the latter for the skilled men, such as saw-filers, sawyers, etc.; day's work 10 hours. Farm hands are very scarce and hard to keep; farming operations greatly curtailed thereby. Wages on farm \$1 per day, 6 A. M. to 6 P. M. for day's work, with one hour for dinner. Two to three hundred farm hands could find ready employment in this county. The labor question has been and is now a serious question with us in all lines.

W. H. Parrish, president Gulf Red Cedar Co., main office, Richmond, Va.:

We have quite a large manufacturing plant at Mobile, Ala., which is in need of 50 to 100 women and boys. If you can be the means of our getting any of this help we will appreciate it.

R. B. Naylor, secretary Wheeling Board of Trade, Wheeling, W. Va.:

Our labor here is plentiful and satisfactory in nearly all lines, and wages are good. There are three exceptions, however. We need bricklayers and stonemasons in the building trades, and 50 to 100 could likely find steady employment here. Our common-labor market is also a little slack, and we could use a good number of unskilled workmen. Greeks and Syrians are generally preferred here, owing to their industry and reliability. With these exceptions our labor market is in excellent shape, and has been for years past.

J. C. Filoreo, Richmond, Texas:

Servant girls for good families are in demand at wages ranging from \$6 to \$10 per month for cooking and general housework. Common day laborers at from 75 cents to \$1.50 a day are wanted at Sugarland, in this county. There is plenty of work for day laborers in the rice fields and on the Brownsville Railroad south of us. Carpenters and bricklayers are in demand in Houston and smaller towns. Printers are scarce.

The power mission consider w Congr so as giving able L There questionate to sion 1 whether mony show o plaints cerned at place, railroad confirm in this any of low as long d issued and La "Com domes English cents. stock modifie these startlin man ro cents. "Eng cordi same c States, For the can tr miles; miles; miles; 21 mil "On neers a Belgar \$2.28 a cents. States as on fo gross e goes to to capi cent, the divi In o would r the pas some of bill clai the rat would a a clear to the i this tim the lea It is ground pers is have hea and dou directly those w the text vision rebates should be there is of the pfect ship that Co

# Plea for Conservative Dealing With Railroads.

By T. G. BUSH, President Alabama Consolidated Coal & Iron Co.

[Written for the Manufacturers' Record.]

The question as to giving additional powers to the interstate commerce commission is soon to be taken up again for consideration by Congress. Since this subject was under consideration by the last Congress it has been constantly discussed so as to throw much light on the situation, giving such information as should be valuable both to Congress and the people. There seems to be some good ground for questioning the right of Congress to delegate to the interstate commerce commission power to fix railroad rates. But whether that be true or not, the testimony that has been furnished seems to show quite clearly that so far as the complaints against excessive rates are concerned, there is but little ground for enacting at this time such a law. In the first place, the testimony from shippers and railroad men alike, without contradiction, confirms the statistics showing that rates in this country are much lower than in any other country, and on an average as low as could be expected, especially for long distances. The following statement issued by the Department of Commerce and Labor ought to be convincing, viz.:

"Compilations made from foreign and domestic statistics show a freight rate on English roads per mineral ton-mile of 1.93 cents. A ton-mile of merchandise or live-stock costs 2.94 cents, and on all commodities an average of 2.32 cents. Against these the figures for the United States are startlingly small, being 0.58 cent. On German roads it is 1.42 cents, on French 1.55 cents, Austrian 1.16 cents and Hungarian 1.30 cents.

"England's passenger rates per mile, according to the *Business Magazine*, on the same classes as there cited for the United States, were 4 cents, Germany's 3.8 cents. For their average day's wages workmen can travel as follows: American, 65 miles; British, 35 miles; Germany, 53 miles; French, 40 miles; Belgian, 36 miles; Italian, 38 miles, and East Indian, 21 miles.

"On American roads locomotive engineers average \$4 a day, England \$1.62, Belgian \$1.01; American firemen get \$2.28 a day, British 91 cents, Belgian 72 cents. Railroad laborers in the United States get from two to four times as much as on foreign roads. Forty per cent. of the gross earnings of the American railroads goes to labor, while only 25 per cent. goes to capital. In England labor gets 27 per cent., capital 38 per cent.; in Germany the division is equal."

In order to show that the railroads would not be materially interfered with by the passage of the Esch-Townsend bill, some of the most ardent advocates of that bill claim that but a small percentage of the rates in effect in the United States would ever be called in question. This is a clear admission that the giving of power to the interstate commerce commission at this time to fix a rate is not urgent, to say the least.

It is universally admitted that the chief ground for grievance on the part of shippers is rebates and discriminations, which have been practiced very much in the past, and doubtless are practiced directly or indirectly at this time. It is claimed by those who can understand and appreciate the text of the Elkins law that ample provision has been made for preventing such rebates and discriminations if the law should be properly enforced. If, however, there is any question as to the provisions of the Elkins law being sufficient to protect shippers, then it seems that the most that Congress should desire to do at this

time would be to amend that law so that these wrongs may be absolutely prevented. It is well understood, both by the railroad people and the shippers, that it would be most unfortunate for any one man, or any number of men, to have the power to fix a rate that would be inflexible, and thus prevent the railroad companies meeting commercial conditions which might necessitate a decrease in that rate rather than increase. It is urged by the advocates of the proposed legislation that the fixing of rates by the interstate commerce commission would not tend to remove the control or management of railroad properties, but it must be admitted by any reasonable man that there is no more vital point in connection with railroad and other properties than the power to regulate the revenue, and it must also be admitted that though the changes made by the commission should be few in number, they would doubtless be far-reaching in effect, for the matter of adjustment of rates throughout this country is so delicate that the change in one may necessitate the change in a thousand or two thousand other rates. It must be admitted that if the interstate commerce commission should undertake to fix rates the confusion which would follow would probably eventually lead to fixing rates on a mileage basis, and if this should be done, it certainly would cause untold disaster to the business interests of the country. This would particularly affect the South in marketing its agricultural and mineral products. If the railroads in the South were not permitted at this time to adjust rates on cotton and cotton manufactured goods to meet commercial conditions, there would be no such prosperity in the cotton-mill interests as exists today, neither would there be anything like present mineral developments, for we well understand that at this time a large percentage of manufactured cotton goods and iron produced in the South has to seek distant markets.

It is unreasonable for anyone to undertake to say how much revenue the owners of railroad properties should receive from their investment, provided it is a fact that the public is receiving fair and reasonable rates on all classes of goods. I would not say for a moment that there are not wrongs committed by railroad companies, locally and otherwise, which should not be righted, and possibly there may be many discriminations, but there are none of such importance or to so affect the interest of any shipper as to justify such drastic legislation as has been proposed. If you take into consideration the question of revenue from railroads, you must consider all these features which involve the maintenance of road, necessary extensions, additional equipment, heavier rails, more ample terminal facilities, etc. As a matter of fact, it is well known to all shippers in this country that whatever the revenue of the roads may be at this time, they are not able to meet the demands in the way of equipment and in other ways which the business of the country demands. Today the entire business interests of the country are suffering from shortage of cars and motive power, to say nothing of the congestion which occurs in handling freight for lack of sufficient tracks and sidings.

I am not lacking in my appreciation of the President in his desire to have the railroads so regulated as to give a square and fair deal to everyone concerned, and I applaud his earnestness in this and other important matters, but I am sure he has been misled as to the chief causes of grievance at this time, and that the remedy pro-

posed will not cure the disease. Any power given the commission to fix rates certainly will not prevent discriminations and rebates. Is it not wise, therefore, under the circumstances, to first relieve the shippers of the greatest evil of which they complain? If the trouble as to rebates and discriminations shall be removed, possibly that will end the whole matter, as doubtless the question of rates could be easily adjusted with the power already possessed by the commission to investigate complaints that may be made. As I understand the present law, the first court of jurisdiction that considers grievances in regard to rates can fix a fair and reasonable rate, although the case may be appealed by one side or the other.

It is unfortunate that this question has been agitated, at least in a semipolitical way, thus preventing probably many members of Congress from acting on their judg-

ment after an investigation of the whole matter. It seems to me it would be wise on their part to apply the remedies gradually, knowing what confusion will result from radical legislation. If the first remedy is not sufficient, then there is ample time to resort to other measures, for it seems quite certain now that Congress will be with us, and have the power to do whatever is necessary to protect the interest of the people.

I do not write this in the interest of the railroad companies beyond my desire to see them, as I desire to see all interests, treated fairly, but I am more interested in the welfare of the country, knowing the great necessity for continued development of the railroads, as they are absolutely essential to the growth and prosperity of the country. I therefore hope that this whole matter will be treated in a careful and conservative manner.

## NATURAL GAS IN LOUISIANA.

### Shreveport and Other Communities to Be Supplied With Cheap Fuel.

[Special Correspondence Manufacturers' Record.]

Shreveport, La., November 11.

The majority of the people of Shreveport are just now beginning to realize that at the very doors of the city lies the greatest fortune that could be imagined. Within less than 25 miles from the limits of the city there are under control by one company five natural gas wells, each producing from 6,000,000 to 15,000,000 cubic feet of gas every 24 hours. It may be that the meaning of such discovery to a place the size of Shreveport is only truly known to manufacturers, and this appears evident, since a syndicate headed by Rufus C. Dawes, former comptroller of the currency of the United States, has made a contract with the owners of the wells whereby the syndicate is to distribute gas to consumers of Shreveport.

About a year ago speculators took up the oil question, it having been reported for several years that traces of oil had been seen near Ananias, a small station on the Kansas City Southern road about 23 miles from Shreveport. A firm known as Savage, Morrical & Savage, the members non-residents of this city, began drilling an oil well. Their work had progressed very shortly when favorable traces were discovered and many people were of the opinion that this parish would soon see a gigantic oil field. However, as the work was continued a gas pressure was developed and the attention of the people was turned to gas.

Savage, Morrical & Savage were not in a position to complete the work they had originally planned, but it can be said for them that the efforts made by them drew the attention of many men of means, who soon secured land in the neighborhood of the field and in a short time over a dozen derricks were up.

Among the companies organized to exploit the territory was the Citizens' Oil & Pipe Line Co., composed of A. H. Leonard, J. W. Atkins, A. K. Chinguan, S. S. Hunter, W. B. McCormick and T. W. W. Stinson, all prominent business men of Caddo parish, of which Shreveport is the seat. The members of this company announced that they would drill for gas, having been satisfied that the field contained a vast deposit of gas, and several months ago they brought in an excellent gas well and soon had it completely controlled with the proper valve. Four other wells have been brought in by them since then, the fifth being two miles from the nearest of the others, which goes to show that the deposit is not confined to a small area.

Yet after the first two or three of these wells were brought in the people of Shreveport did not seem to appreciate what a supply of natural gas meant to a city of about 30,000 inhabitants, but the discovery attracted attention elsewhere, and the result was that three members of the company owning the wells recently made a trip to Chicago, where they met Mr. Dawes, who is vice-president of the city electric-light and gas company, and made arrangements for the distribution of gas in the city proper and to manufacturers whose plants will be erected on the outskirts.

Mr. Dawes recently paid Shreveport a visit, and the final details of a contract were completed. Although the agreement has not been made public, Mr. Hunter stated yesterday that it simply meant that the Citizens' Oil & Pipe Line Co. will furnish the gas to the city distributing company, and that the well owners will receive a royalty on all of the gas distributed in Shreveport. A franchise was recently granted the Citizens' Company, and this has been transferred to Mr. Dawes. Under the terms of the franchise the maximum charge of illuminating gas is 50 cents per 1000 cubic feet, against \$1.60 now charged by the company furnishing artificial gas. Mr. Atkins of the Citizens' Company states that he expects to see the company in a position to furnish gas to residences for 35 cents per 1000 cubic feet and to manufacturers at 10 to 15 cents per 1000 cubic feet.

Pipe has been purchased for the constructing of a pipe line from the wells to Shreveport, and the work of building the line will be started as soon as the material arrives, and it is expected here early next week. Expert pipe-line men have been secured for the work, and they are now on the ground. It is hoped to have the line open by January 1, 1906.

Texarkana, Jefferson and Marshall, Texas, are almost as close to the field as is Shreveport, and it is believed that the Citizens' Company will shortly begin negotiations for carrying pipe lines to those places.

The strongest well owned by the Citizens' Company produces a supply of gas estimated at 16,000,000 cubic feet every 24 hours, enough to supply the entire city of Shreveport for one year, according to the ratio of consumption in force heretofore.

The company employed S. R. Perkins of Kansas City to make an expert report on the wells which were under control on

August 3 last, and in this report Mr. Perkins states that he made a thorough test of well No. 2, the largest producer at that time, as follows:

The rock pressure is 300 pounds, with a volume of 8,000,000 cubic feet of gas in 24 hours; the odor is sweet, seemingly free from any hydrogen sulphide or other pungent qualities commonly present in natural gas. The well promises to be of remarkable longevity, because of the thickness of the gas vein, its character and its depth.

Mr. Perkins in his report says he has tested wells in every gas field in the United States, and that he has no hesitancy in saying that this field is second to none thus far discovered. He says that, in his opinion, it embraces a large territory similar to the Pennsylvania, Ohio and West Virginia area.

Since Mr. Dawes has taken such an interest in the field after he received private expert reports the people here are learning what the great discovery means, and they are rapidly taking up the proposition of encouraging the enterprise.

Among the other companies operating in the field is the Producers' Oil & Pipe Line Co., which is believed to be a part of the Standard Oil Co. The company is not chartered here, and most of its business is handled from Beaumont, Texas. This company has some excellent wells in the field near here, and it is said they contemplate the construction of a pipe line to Shreveport.

The only serious blow-out to occur in the field took place last April in a well which the Producers' Company was drilling for the Caddo Oil & Mining Co. This well, which was in the neighborhood of 1200 feet deep, blew out and rapidly grew from an eight-inch hole to one 300 feet in diameter at the top. A regular geyser was formed, and millions of cubic feet of gas issued from the well. In May this gas was set afire, and ever since then it has burned. Thousands of people have visited the field for the purpose of viewing this burning well. A bubbling mass of fire and water is the sight there. The water bubbles 30 or 40 feet into the air, and mixed with the water is the burning gas.

In a suit filed by the owners of the land against the company which drilled the well, brought to compel the latter to stop the waste of gas, the plaintiffs estimate that 50,000,000 cubic feet of gas are wasted every day.

A few days ago Governor Blanchard and Major F. M. Kerr, State engineer, visited the burning well for the purpose of making an inspection with a view to devising a way to stop this terrible waste of gas, which the governor feels will eventually prove very costly to the supplies of the other wells. The State engineer will in a short time submit to the governor a report on the subject.

Recently a well being drilled on land located at least seven miles from the field proper showed a strong gas pressure, which strengthens the belief that the field is one of large area.

That the Northern manufacturer seeking for cheap fuel has not been attracted to Shreveport is a puzzling question, and the only reason assigned for the failure of factory owners to locate near the field is that the gas supply has not been widely advertised. Land between Ananias and Shreveport can be secured at exceedingly reasonable prices. The wells are on the main line of the Kansas City Southern.

In Shreveport there are many railroad outlets. The Texas & Pacific, with a main line from New Orleans to El Paso and branch lines to Texarkana and Natchez; the Cotton Belt, with a straight line to St. Louis; the Kansas City South-

ern, with its main line from Kansas City to Beaumont and Port Arthur; the Houston & Shreveport, between this city and Houston; the Missouri, Kansas & Texas, running to Texas; the Vicksburg, Shreveport & Pacific to all Eastern points; the Louisiana Railway & Navigation Co., with a new line almost completed to New Orleans, make Shreveport an exceptionally good distributing point.

W. A. PAYNE.

#### Kentucky-Tennessee Oil.

[Special Cor. Manufacturers' Record.]  
Barbourville, Ky., November 12.

Kentucky and Tennessee oil operators are now letting contracts for winter drilling, and all indications point to a continued season of activity during the next few months, which are usually quiet in other fields because of the cold weather. In the lower Kentucky fields some large contracts have been made during the past few days. The higher prices now paid by the Standard for Kentucky-Tennessee oil will serve to keep the drill going in many of the divisions where things were rather quiet last winter.

Some important extensions to the Wayne county field have been made by recent work. That is the largest field in Kentucky, and is the center of half the work now being conducted in the State. Strikes seven miles ahead of production in Wayne county are now regarded as important, and the Cumberland Pipe Line Co. is extending its line to the new development. One well showing an initial daily production of 300 barrels has been drilled. During the past two weeks 10 strikes have been made in Wayne county. Quite a number of new operators have entered that field lately, West Virginia, Pennsylvania and Ohio contributing considerable capital for new drilling.

The Hart Clay, Oil & Mineral Co., a \$150,000 concern, has been organized for prospecting purposes in Hart county, adjoining the Barren-county development. The new company will follow up some old wells that were drilled several years ago, and expects to develop a field in Hart county. Contracts for the drilling of a number of new wells will be made at once.

Several counties not included in the oil field proper are being drilled on a prospecting basis. Pennsylvania operators are drilling a series of searchers in Clay county; a new company has started initial work in Shelby county, and Adair, Metcalfe, Clinton and Pike counties are centers of a little drilling.

In the established fields of Wayne, Wolfe, Cumberland, Floyd and Knox counties there are now probably 100 wells in course of drilling.

An independent refinery has been established at Georgetown, Ky., owned by Kentucky oil operators and Chicago capitalists. The new refinery has a daily capacity of 300 barrels. Crude oil is gotten from the lower Kentucky fields, the company paying three cents per barrel more than the Standard.

The lighter grade crude now commands 91 cents per barrel, while the heavy oil is quoted at 49 cents. Operators expect the price of light oil to reach the dollar mark this winter. Advances aggregating 16 cents have been made within two months.

W. S. HUDSON.

The number of manufacturing establishments in the Indian Territory has increased since 1900 from 176, with an output valued at \$2,628,248, to 460, with an output valued at \$7,347,306.

Since 1900 the capital invested in manufacturing at St. Louis, Mo., has increased from \$150,510,849 to \$265,891,387, and the value of the products from \$193,691,595 to \$267,029,314.

## A NEW ENGLAND VIEW OF THE SOUTH.

By SYLVESTER BAXTER.

[Written for the Manufacturers' Record.]

### II.

The labor problem appeared to be giving no little concern about everywhere in the South. I found a general impression among manufacturers that labor conditions were bound to change very materially, perhaps radically, in a comparatively near future. The substance of what the president of an important cotton-manufacturing company in North Carolina told me in discussing such matters is worth repeating. "For a long time we have had a great advantage in the way of cheap labor," he said. "But we are getting pretty near to the end of present resources. Our native labor supply of pure American stock has served us in good stead. But not only is there not much opportunity for the expansion of manufacturing while we are limited to the labor supply at hand, existing establishments must be alert to keep the operatives that they have. Our company, for instance, is doing its best to make its present force permanent by promoting conditions that will make them contented and that will enhance their efficiency. We take special pains to house our people well and attach them permanently to the locality. For instance, we own a large tract of land near our mill; to good industrious men we sell lots on most favorable terms and encourage them to build houses of their own. If you will visit our mill you will see a healthy, well-fed and pleasant-looking set of men and women, such as you will not be able to find surpassed anywhere." I found his words well borne out.

The same gentleman told me that whereas the development of manufacturing had caused a general movement of the rural population from the farms to the mills—and indeed its continued progress had been made possible only by that movement—this movement had now reached its maximum. A movement back to the land had already set in. This was due to the fact that agriculture was becoming more profitable. It was a more advanced sort of agriculture, more diversified, and requiring greater intelligence than the old slipshod methods. And the new generation of farmers was applying to its task the intelligence acquired under the more alert conditions of manufacturing life. Manufacturing must continue to develop, for it was still practically in its early stages in the South. But manufacturers must look about them for new sources of labor supply. To this end the encouragement of immigration was necessary.

"We are bound to go through the same stages that your New England manufacturers have passed through," said my informant. "You first had only native-born help in your mills, just as we have now. But just as foreign operatives of various races have been coming in and for the past half-century have formed practically your entire laboring force, so foreign mill labor is bound to come in here, while the native labor for the greater part will find its way to higher planes of occupation. All this, for a while at least, may prove vexatious in various ways and make us much trouble. But on the whole it will probably turn out for the best. We can't expect things always to remain as they are. They never do.

"At present our cotton-manufacturing industry has no great advantage over yours in New England. All told, our labor costs us very nearly or quite the same. As to the raw materials, while we have the North Carolina cotton at our doors and consume almost the entire crop of it, it must not be forgotten that a large proportion of our supply in the shape of the long-

staple cotton required must come from the Gulf States. And this, owing to the cheap rates for water-borne freight, is obtained as cheaply by your New England mills as we can get it."

I was afterwards told in Columbus, Ga., by Mr. Frederic B. Gordon, the president of the Columbus Manufacturing Co., that although this was true as to the mills further north, in the Carolinas and elsewhere factories situated as favorably as those of Columbus had a great advantage over those of New England in this respect. Columbus, for instance, lay practically in the midst of the long-staple cotton region. The amount of such cotton that his own mill consumed in one year would cost a New England mill \$23,000 for freight alone—a sum which in itself would make a handsome dividend.

Manufacturers whom I talked with in various parts of the South agreed that the Piedmont plateau was practically the only region where in the long run cotton manufacturing could be successfully carried on. The Piedmont climate was favorable and the labor supply was of excellent quality. The more temperate climate was not adverse to physical exertion, but that of the coastal plain induced lassitude, and labor there was not dependable. With the Piedmont region, however, should be included the favorably-located river towns immediately at the foot of the plateau—places, for instance, like Columbus and Augusta—where magnificent water-powers are at hand and where the Piedmont labor supply can be readily drawn upon in various respects; such places offer ideal conditions for manufacturing. A great boon for cotton spinning in this country has been the introduction of humidifiers in the mills. This not only counteracts the economic advantages conferred by the greater and more even atmospheric humidity in England; in the South the innovation greatly enhances the comfort, the health, and correspondingly the efficiency of the operatives. In the Columbus mill, for instance, I found the atmosphere exceedingly agreeable. Mr. Gordon said that the summer indoor temperature was steadily kept something like 10 degrees lower than that outside. In the almost semitropical climate of the place this meant an immense contribution to comfort, and naturally gave the mills, with their thoroughly cleanly conditions and pleasant aspect, most agreeable associations for the workers.

The North Carolina manufacturer whom I have been quoting said that as a rule the great advantage of the Southern mills lay in the thoroughly modern character of their plants. This meant the highest possible efficiency. Southern manufacturers in business enterprises and sagacity yielded the palm to none. They appreciated their advantage in this respect, and could be depended upon to do their best to maintain it by keeping abreast of the times with all possible improvements.

I took particular pains to note as carefully as possible the conditions of the working classes wherever I went—their surroundings in the mills, their housing and their general environment. Of course I could not go everywhere, and there may have been conditions materially worse than what I saw. But since no pains were taken to show me only the best, it seems fair to conclude that what I saw was typical. I was therefore led to infer that much of what had been written giving an adverse view of such conditions

was in part grossly exaggerated and in part made up of malicious misrepresentations. I kept my eyes open and was on the lookout, and I certainly saw nothing of the sort such as, for instance, was set forth with much sensational circumstance in a certain New York journal not long ago.

It seemed to me that on the whole the present status of the Southern mill operatives must be a vast improvement upon that of the same class before changing from rustic to factory conditions. Isolation, illiteracy and a generally sluggish degree of activity are certainly not promotive of desirable individual or social development. The change to the mills brought the same people into more intimate relations with their fellows and the world at large, and under the influences that collective activities stand for. This means a quickening of the faculties, physical and mental, and a general awakening—a development of latent possibilities in various ways. Children now have educational opportunities wholly impossible under the old rustic conditions. A more intelligent and more efficient new generation will be the consequence with the awakening of capacity and ambitions and the corresponding rise of a goodly proportion from the laboring classes to the higher grades of occupation. Experience elsewhere in this respect will be repeated in the South.

The housing of the mill operatives must be a great improvement over the average rustic cabins that originally were their homes. In certain respects they have the advantage of the average New England operative here. The houses, to be sure, are less substantially built than in New England. But this is offset by the more benign climate. In Northern mill tenements there is more crowding, as a rule. The Southern operative has infinitely more fresh air both at home and in the mills. A fortunate circumstance for Southern mill hands is the fact that, as a rule, the mill surroundings are either rural or at least semirural. The evils of urban congestion are therefore absent. However humble the operative's cottage may be, it has a goodly plot of ground about it, with an opportunity for a little garden. The vegetables thus grown considerably reduce the cost of living and correspondingly enhance its quality. I found at the Atherton mills in Charlotte, N. C., that the operatives had also the privilege of cultivating, rent free, as much of a large tract belonging to the company as they chose to. Possibly the same custom may obtain with some other mills. I heard about some mill hands from New England who had come South to better their condition. They had settled near mill towns in North Carolina and had successfully gone into truck gardening for the Northern market, sending their children into the mills while the parents worked on the land and firmly established themselves. It was predicted that before long the children would be withdrawn from the mills. That was one of the ways upward from the lower ranks.

The general testimony of employers familiar with both was that Southern labor was not so efficient as that of the North. Probably the difference is more casual than intrinsic. The native stock to which the Southern operative belongs is evidently superior to the foreign racial conglomerations that in these days make up the bulk of New England mill hands. The latter, however, seem to respond to their environment, working according to the traditional standards, eventually taking on the coloring of the community about them and identifying themselves with it in the course of a generation. It seems as if the lower efficiency that employers in

the South complain of must be a heritage from the former rustic isolation, and consequently sluggish faculties of the class. With the quickening influences of industrial life a heightening of efficiency will naturally come.

Despite a lesser efficiency, Southern labor appears to have been sufficiently cheap to induce various Northern manufacturing concerns either to transfer their activities wholly to the South or to establish important branches there. The manager of such an industry told me that although mechanically skilled labor was also less efficient, still the advantage of greater cheapness in this respect, together with that of nearness to the Southern market for the product, was sufficient to make the step worth while. As to the longer hours of labor in the South, the superintendent of a North Carolina mill, himself a Northern man, said that the burden for the operatives was to a considerable degree offset by the circumstance that in the South it was the universal custom to live close to the mill; hence no time was lost in going to and from work.

I was pleased to note the human interest taken by the management in the welfare of the operatives in various mills. This may be called an enlightened selfishness. But it is none the less commendable when either employers or employed thus realize that their mutual interests are identical. A most conspicuous example in this direction is that set by the great Proximity Manufacturing Co. at Greensboro, N. C. In the Proximity village the company had planted the streets with shade trees and had offered numerous prizes for flower gardens and other improved surroundings about the cottages. The general response indicated that the raw and barren aspect so common to mill villages would soon give way to pleasant aspects with homelike associations. The company had established an excellent public school, which included a kindergarten and a department for lessons in cooking. Since malnutrition induced by unsuitable food is said to be a main cause of the comparatively low efficiency of labor in the South, the effect of better standards in cooking should contribute in no small degree to a higher standing in such respects on the part of the next generation. The Proximity Company had adopted similar methods for its other two mill villages close by. Near the largest of these, White Oaks, it had laid out an extensive public park with various provisions for outdoor recreation.

As many experiments elsewhere prove, there can be no doubt of the profitable nature of such activities. And the company itself not only profits by them; the community at large benefits in equal measure by accretions of members with greater intelligence, capacity and more diversified and intensified wants. Here is a factor that too many leaders of industry are apt to ignore. Cheap labor has been counted as one of the most valuable assets of the South. In a degree and temporarily this is largely true. So long as the chief market either lies at a distance or locally provides a sufficient demand outside of the laboring classes, there is an advantage in the existence of abundant labor units working at a low wage. The economic ideal, however, is highly paid and highly efficient labor. This, working with the best-developed labor-saving devices, results in a low labor cost that makes highly-paid labor actually the cheapest. Mr. Phenix' observations in New England furnish evidence of this.

"New England Thrift" is the thrift of what altogether are probably the best-paid working classes in the world. They do not merely earn enough to keep body and soul together. Their earnings not

only yield a surplus that makes up the enormous savings-bank accumulations of New England and thereby provides the capital for vast industrial undertakings; they have a high standard of living; their expenditures very largely flow back into the treasuries of the factories where they work, either directly or indirectly, by creating a demand for the goods they produce; the workers buy good and varied food and clothing of superior quality, thus supporting extensive retail businesses that, in turn, make possible a large and prosperous middle class with a correspondingly highly-developed purchasing power; they lavishly gratify their amusement proclivities—something that, for instance, gives Boston its proverbial reputation as "the best show town in the United States."

Of course, even in New England industrial conditions are by no means ideal.

Many defects might be pointed out. But in various ways they represent economic and social progress. Modern industrial developments in the South likewise attest the soundness of this principle. As the rustic population, with its scanty and self-supplied wants, has so largely turned to the mills for employment, the wages earned have contributed materially to the new prosperity of the South. Better food and better clothing has been demanded, numerous new wants have been created, and these have gone no little ways towards providing an important domestic market for Southern industries of all sorts. Hence it is evident that the more efficient and the better paid the Southern laboring classes become the entire South will profit therefrom in the same enviable fashion that distinguishes present-day New England conditions.

## Export Markets For Southern Coal.

By F. E. SAWARD.

[Written for the Manufacturers' Record.]

It is not at all out of the way to keep on with the subject-matter of exporting coal, for there is no other one topic of such importance. It is important because a market is needed most of the time for surplus output. We are also interested in the expansion of the coal trade by the probable use of craft sailing under the American flag, inasmuch as that would also mean the growth of other lines of traffic to be of general benefit to the people of these United States. Hence the value of the remarks that follow, showing what others are doing. This information is of value to those endeavoring to work out this expansion.

We should be paramount on the seas in the matter of carrying trade. That could be brought about by the adoption of some of the carriers on the sea by purchase or otherwise. Centuries ago Sir Walter Raleigh said: "She who has the ships has the commerce, and, having the commerce, the wealth of the world." There was a time when we had the carrying trade of the seas with our clipper ships, and with proper legislation this may come again, with sail or steam craft, to the benefit of no one trade so largely as the coal trade, and the South is immensely interested in that. Were it possible to capture one-half of the coal trade of the Mediterranean there would be a great impetus given to this soft-coal trade, and the opportunity will come with united action on the part of the owners and operators of industry working upon their legislative representatives in Congress. One may travel the world over and find at all the "ports of call" of the foreign steamship lines that there is a supply of coal. It is only too often Welsh coal, for the Britisher is sharp at seeing the advantage of things, and forwards cargoes to these places. Take up the list of "ports and places," and running through the alphabet is found the tale of bunker coal, its variety and price. All the ports cannot be named within the space of this article, but a few examples are given:

At Aden, South Wales coal sells at 30s. per ton; at Bermuda, Pocahontas is \$2.90; at Constantinople, Welsh is 20s.; at Geneva, 20s. 6d.; at Gibraltar, 22s.; at Halifax, Nova Scotia coal sells for \$4.25; at La Plata, Welsh is 24s. 6d.; at Marseilles, Welsh is 22s. 6d.; at Naples, North Country coal is 18s. 6d., Welsh, 21s.; at Port Said, Welsh is 23s. 6d.; at St. Lucia, Pocahontas is 22s. 6d.; at Suez, Welsh is 33s. 6d.; at Yokohama, Japanese coal is \$4 (usually); at Zwandam, where the great North Sea canal ends, one can get Westphalian coal at 14s. 6d.

So it goes with the foreign ports of call. Take those on the American side and we find at Baltimore, West Virginia or Clearfield coal at \$3.10; Mobile, Alabama coal at \$3; New Orleans, Pittsburgh coal at \$3.60; Newport News or Norfolk, West Virginia coal at \$3.10; Pensacola, Alabama coal at \$3; Port Arthur, Texas, offers Pocahontas and Alabama coal at \$5.75, with Indian Territory at \$5.50; at Savannah one can get Pocahontas at \$4.95 and Cumberland at \$4.75; at Wilmington, N. C., Pocahontas can be had at \$5.10. These are all tons of 2000 pounds. By this list one can readily see that Southern coal is the source of supply for "bunker" purposes at these Atlantic and Gulf ports.

It is interesting in this connection to note that best steam coal f. o. b. Cardiff is quoted at 13s. 7d. per ton; best Newcastle, 9s.; best Scotch, 8s. 9d. Patent fuel at Cardiff sells at 13s. per ton. Freights from Cardiff to the Mediterranean are mainly at 6s. per ton, and about the same from the Tyne and other British ports of loading.

Freights from our ports are quoted, mainly to those nearby ports that we are now sending to, thus: \$1.80 to \$2 to Colon, \$2 to Vera Cruz, \$2 to Tampico, 15s. to 17s. to Buenos Ayres, 16s. to 18s. to Rio, 17s. to 19s. to Santos, 12s. 6d. to 13s. 6d. to a direct port in the Mediterranean, \$4.75 to \$5 and discharged to Manila, \$5 to \$5.25 to Japanese ports.

I have said something heretofore about other countries taking trade formerly had by Britain. Now it is claimed that a French firm of briquette makers, usually getting their supply of slack from Britain, has taken German coal. Thus an order of 100,000 tons of coal has been lost to Wales. At the present time it is impossible to buy small coal of good quality at a price that would enable it to be shipped tax free. The imposition of a tax of 1s. per ton on coal bought at, say, 6s. 6d. means increasing the price about 16 per cent., and this at once makes the cost so great as to enable German and other coals to successfully compete.

We have had the annual reports of the Norfolk & Western and of the Chesapeake & Ohio, showing at what low rates they carry coal. It is low, and the distance is long. Compare it with the British trade. The average distance over which coal is carried in South Wales is about 20 miles, and the average rate per ton is about .6d. per ton-mile. In West Yorkshire the average rate to Hull is about .6d. per ton-mile, while to Goole the rate is only .4d. less, although the distance

from the collieries to that port is 22 miles under that to Hull. A very large part of the coal raised in Scotland is placed f. o. b. ships on the Clyde, or at one or other of the Scotch shipping ports, for under 1s. per ton. It is the same with the collieries in the Great Northern coal field. In these four districts—South Wales, South and West Yorkshire, Durham and Northumberland, and Scotland—the average cost of transporting coal from collieries to shipping ports will not exceed 2s., and is probably materially under that figure. This being so, the net result is greater to the British colliery owner than to those in our country, and therefore the necessity of opening up a trade abroad for our coal, so that prices may not be depressed as they have been. Given an opportunity to ship what might be "surplus," the home price would be increased, as has been the result in many other lines of business. Shipments are going forward to the West Indies and South America as fast as suitable charters can be made, but this tonnage is small compared with future possibilities. The Mexican Central contract was placed recently for Baltimore loading. This company places one of the largest contracts in the market, and its business has been sought after by all the large

companies. For the past two years, outside of taking an occasional cargo of Northern coal, it has drawn its supply from the Alabama field, on account of cheaper fuel, but this year it goes to West Virginia, coal loaded at Baltimore, as stated.

With the new line from the coal fields of West Virginia (the Deepwater-Tidewater) in operation some persons fancy that competition of a dangerous sort will accrue against the other West Virginia lines. It will be some time before the line is completed, and the demand for coal is increasing. It will "come into play" in the supplying of present markets which are now furnished with other West Virginia coal. With a fair chance at the markets of the world by a subsidy bill for our "slow freighters" we will be just in time to compete for the trade now using British coal.

There is no danger to our present trade from any reciprocity treaty. The Canadian coal producer does not expect anything of the kind, not in the near future. The whole situation in the United States has changed within a few years. No Southern senator whose State depends upon coal would vote for "free coal" or for reciprocity in coal.

## AMERICAN MINING CONGRESS AT EL PASO.

[Special Correspondence Manufacturers' Record.]

El Paso, Texas, November 13.

The American Mining Congress is holding its eighth annual sessions in El Paso this week, convening Tuesday and adjourning Saturday. That the delegates will on the closing day unite in resolutions favoring in the strongest terms the establishment of a department of mines and mining at Washington, in charge of a secretary who shall be a member of the President's Cabinet, is regarded by the leading spirits of the congress as beyond question. Another result of the congress will be a declaration in favor of legislation which will promote uniformity in the mining laws of the different States. The sentiment in favor of this action is likewise regarded as unmistakable.

These effects are national in their importance. To this immediate section of the country the local effects will be even greater. The congress will call to the attention of hundreds of men who control the destinies of the great mining enterprises of the land the importance of the mineral properties of this section: it will arouse fresh interest in the great Southwest, and it will promote new bonds of friendship between the United States and the Republic of Mexico.

Situated in the center of a cobweb of railroads which stretches out in all directions, tapping the richest districts of the Southwest, El Paso is pre-eminently adapted to be the meeting-place of a convention such as the American Mining Congress. Following the sessions, hundreds of visitors will make side trips into El Paso's tributary territory before returning to their homes. They will have opportunity to investigate for themselves the claims which have been made for the great copper properties of Arizona and Sonora, the placer gold-mining propositions of Sonora, the newly-opened copper mines of Chihuahua, the quicksilver and sulphur properties of West Texas, and the silver, lead and copper camps of New Mexico.

El Paso is five minutes' ride from the Republic of Mexico. A street-car line connects the city by an international bridge with Ciudad Juarez, the most thriving city on the northern border of Mexico and the most important port of entry into the sister republic from the

north. The State boundary between Texas and New Mexico is two miles west of the city.

El Paso claims as her own West Texas for a distance of 200 miles east of the city: Chihuahua, the State of Mexico adjoining on the south, of which Ciudad Juarez is the northern metropolis; New Mexico, of which it is a part geographically, although by no means even distantly related to it politically; Arizona, the star Territory of the Southwest, and Sonora, the Mexican State adjoining Chihuahua on the west, a close rival of Arizona in its rapidly-developing mineral districts.

These districts are in large part dependent chiefly on their mineral industry. Arizona and Sonora, at least, are pre-eminently mineral sections, while New Mexico and Chihuahua have large mineral properties which, after many years of varying fortunes, appear to be mounting steadily in importance. West Texas is—in so far as it is other than a district of cacti and jack rabbits—a rich grazing land and an agricultural field of no mean importance. The scientific irrigator is rapidly defeating the sagebrush, and fields of alfalfa and cotton are supplanting the mesquite and greasewood. West Texas, however, is not without its mineral deposits—quicksilver, sulphur and other beds which are not yet fully developed.

As the chief commercial city between Denver and the City of Mexico and between Fort Worth, San Antonio and Los Angeles, El Paso is closely connected with these districts. The city sends mining machinery to the mines, clothing, groceries and household furnishings to the stores and hardware to the ranches. The jobbing houses of El Paso control the district, with the exception of one or two lines which are favored by advantageous rates from railroads which are developing certain sections.

The most distinctive feature of El Paso is its smelter industry. The Kansas City Smelting & Refining Co., part of the "smelter trust," operates a copper and lead smelter which employs nearly 1500 men. It has the largest lead output in the Southwest; in fact, it is not surpassed in capacity by any lead smelter in the land. Its copper business is of less mag-

nitude. The great smelters of Arizona and Sonora surpass it. The old "Federal" smelter, a copper smelter, has been put in condition for operation, and will shortly begin the treatment of ores produced in the mines controlled by the syndicate which has just taken it over.

Besides the smelters, there are many assayers, mining engineers, mine promoters and large mine owners who make their homes or their headquarters in El Paso. The railroads, perhaps, were primarily the making of El Paso, but the mineral interests of the surrounding district were a close second in importance. The mining atmosphere prevails. The delegates and visitors to the congress feel that the air is instinct with the spirit of the mines, and they are given first-hand acquaintance with the mineral interests of the Southwest.

The sessions of the American Mining Congress this year are made as practical as possible. Dry and needlessly technical subjects have been eliminated, and live discussions of the problems that are nearest to the mining men are given predominance. The speakers are men of wide practical experience, and the sessions are such as will be listened to with interest by any man who has the development of the country's mineral resources at heart. An effort has been made to make this a more distinctively "mining congress for mining men" meeting than any one of the seven which have preceded it. The nature of the discussions may be gained from the following addresses which are on the program:

"Amendments Advisable to the Federal Mining Law," by R. S. Morrison of Denver.

"Co-operation Between State Mining Schools and State Mining Bureaus," by Prof. Victor C. Alderson, president of the Colorado State School of Mines, Golden, Col.

"The Zinc Industry of the Missouri-Kansas Fields," by Congressman C. M. Shartel, Neosho, Mo.

"Copper Smelter Smoke," by Prof. W. S. Thomas, chemist of the Bingham Smelting & Refining Co., Bingham, Utah. (With experiments by Lewis A. Merrill, George A. Kerwin and James A. Leslie.)

"An Eastern Exhibition of Minerals and Mining Machinery by the American Mining Congress," by W. M. Porter of Chicago.

"The Attitude of Eastern Capital Toward Western Mines in the Development Stage, and How to Attract It," by Frank E. Wire, Libertyville, Ill.

"The Quicksilver Deposits of Terlingua District, Brewster County, Texas," by Prof. William B. Phillips, president of the Texas State Mining Association.

"Mineral Resources of New Mexico," by Prof. Fayette A. Jones, field assistant of the United States Geological Survey, Albuquerque, New Mexico.

"Mine Drainage Districts," by Lyman White, State commissioner of mines, Denver.

"Forestry as It Affects the Mining Industry," by R. E. Benedict, inspector of the United States forestry service, Thatcher, Ariz.

"Advantages of the Greatest Co-operation Between the United States Geological Survey and State Mining Bureaus," by Hon. Charles D. Walcott, director of the United States Geological Survey, Washington, D. C.

"Prevention of Mining Frauds by State Legislation," by Lewis Allbury, State mineralogist, San Francisco, Cal.

"Relation of Mining and Smelting Between Mexico and the United States," by James W. Malcolmson, El Paso.

"Ores Worthless Twenty-Five Years Ago Which Have Been Made Valuable by

Improved Mining Methods," by Prof. William P. Blake, Tucson, Ariz.

"The Examination of Mines Preliminary to Purchase of Today as Compared With Twenty-Five Years Ago," by Robert Gilman Brown, San Francisco, Cal.

"Proposed Remedy for the Difficulty Arising From Inaccurate Record of Patent Surveys," by Prof. A. J. Hoskin, assistant professor of mining, Colorado School of Mines, Golden, Col.

The discussion of the proposed national department of mines and mining is to be one of the closing features of the congress. For months prominent mining men of the West have been urging the establishment of the national department, the head of which shall be a Cabinet member. The efforts which have been put forth are crystallizing in this congress. The mining men declare that the mineral interests of the land have not been given attention proportionate to their importance. They assert that the federal government should take an active hand in their promotion in order that the interests of the country may be conserved, that fraud may be eliminated as far as possible, and in order that improved methods may be investigated. They declare that the mining districts are in crying need of the same fostering care which the Department of Agriculture has given the resources of the soil.

Side by side with this movement for a secretary of mines and mining in the national Cabinet is progressing the movement to secure greater uniformity in the mining laws of the States of the country. The latter movement is regarded as of lesser importance, but its advocates are determined, and there is no doubt that the congress will come out with strong resolutions favoring the movement.

El Paso has made lavish preparations for the visitors, and a call has been made for the entire Southwest to attend the gathering, not only delegates, but visitors who are interested in the side attractions, chief of which is the great international championship rock-drilling contest between teams of two men. In addition to the first prize of \$1000, donated by Col. W. C. Greene and known as the Greene purse, there are lesser prizes of \$800 and \$600. The most cherished prize, however, is the magnificent silver loving cup given by the Mine & Smelter Supply Co. to the International Miners' Association, to remain in custody of the association until won three times by the team from the same district. Chamberlain and Make the first time, and Chamberlain and Malley the second time have won the cup twice for the San Pedro camp of Chihuahua, and Chamberlain and a new partner are making the supreme effort this year to lift the cup.

### To Grow Fruit in Alabama.

Mr. W. H. Harrison, Jr., contractor and builder of city gas plants, in the course of a letter written to the MANUFACTURERS' RECORD from Toledo, Iowa, says:

"I have always been a friend of the South. In 1888 I wrote and published a book without the aid of any railroad or land company entitled 'How to Get Rich in the South.' The Northern papers had considerable sport at my expense, because at that time I was pursuing my avocations in the North, but I sold several thousand copies, and I now propose to take my own medicine, though I am preparing to develop a large tract of property in Alabama. Since 1888 I have had considerable experience in the South, having been traveling passenger agent for the Three C's for three years. After the failure of that road I was Northwestern passenger agent for the Georgia Southern & Florida, going from them to the Mobile & Ohio. I had charge of the editorial work

and advertising and the west as same route lecturing South. "I have coming at Deer runs for tract. We as fast as the tree peaches, of summer peaches and when have to have the m. and the sheep and have their end."

NASH  
Many  
[Speci

By us are necessary to be cut of the is sorted to ville's of and aze 18 month been previous that ter highly however with ra the per strong, "boom"

One growth which the me homes Four la of small and re property operating Nashville End, B each of new he past year rejected Those the ope not embe fers or by the A few the int building yet be the blo in except is a de after a ence in come— problem A num built. of their by the model

The has rea the co

## ANOTHER SOUTHERN LIGHT THAT FAILED.

[Written for the Manufacturers' Record.]

Again the South has been in the throes of another "conference." Mus nascitur, as usual, and nevertheless, the MANUFACTURERS' RECORD is asked why it opposed it. The main reason for opposition was set forth in our issue of September 21, in connection with quite a long letter to Mr. C. W. Olson, president of the Chattanooga Chamber of Commerce, as follows:

"We are of the opinion that no such 'conference,' however earnest and public-spirited may be those who have been persuaded to give the plan countenance, can have at any time outcome of practical benefit to the South."

To President Olson we wrote:

"The men who are most vitally concerned with the subject of immigration and the rather remotely related subject of quarantine are not the men who may be expected to participate in the proposed conference. They are too busy, and, furthermore, they know that it is impossible to formulate any action as to immigration which would receive anything like general support from the South. The difficulties as to framing a generally acceptable policy as to quarantine would be even greater."

Our opposition was strengthened as promotion of the "Conference on Immigration and Quarantine" persisted in its purpose to use the gathering as a means of cultivating a sentiment against foreign immigrants and resorted to the flamboyant style of advance notices which had brought ridicule upon the "Southern Industrial Association" of a few years ago and the "Southern Industrial Parliament" of last spring.

The MANUFACTURERS' RECORD went to some pains, and not without success, as the outcome proved, to counteract the anti-foreign propaganda, which was, indeed, only large in the sound that it made, and the final results of the gathering, to which not a few representatives of the South were attracted, the men of Louisiana, for instance, to make impossible the endorsement of any such policy as that supposed to be sedulously cherished by statesmen like Governor Vardaman, and a number of railroad officials active in the work of attracting immigrants to the South, to prevent snap action on foreign immigration.

As another warning to the South against such undertakings the wide divergence between promise and performance in this particular case is set forth below from the records of the conference.

First, as to immigration.

**The Intent.**  
The Huntsville (Ala.) Chamber of Commerce, August 10: "The appearance of yellow fever at New Orleans, and the announcement that the same originated in that city, reveals the importance to the entire South of having that city kept free from such a menace in the future, and the making of New Orleans a port of entry for an indiscriminate reception of foreign immigration, which is now the case at our Northern ports of entry, and will continue to be the case until some restrictions are had in our present immigration laws, will augment that menace, and the whole South should be consulted before such a step is taken."

The Chattanooga *News*, August 23: "The purpose of the conference is to discuss the adoption of a policy for the exclusion of foreign immigration, the idea being that the South is now practically free from the intrusion of foreign immigrants, and in consequence the labor conditions are better than in other parts of the country."

The Chattanooga *News* a few days

later: "The purpose of this conference will be primarily to consider the advisability of more stringent legislation in the matter of the admission of foreign immigrants to Southern ports. The intrusion of an undesirable class of immigrants in the South will, it is believed, do much to unsettle labor conditions in the South, whereas this section of the country is now free from this class and its labor problem presents fewer difficulties than that of sections which are becoming filled with this immigrant class."

The Delphic utterance of the call for the conference, September 16: "The South will welcome desirable immigrants from any and all lands, but it has already racial problems of such gravity that no others should be invited until proper safeguards are provided in advance of their coming."

The Chattanooga *Times*, September 28: "We have all been apprised of the movement inaugurated in the East to turn as many of these immigrants as can't be cared for in the East and North toward the South. It is to devise means to prevent the indiscriminate rushing of these foreign peoples into the South that this conference is to be held."

The Louisville *Courier-Journal*, October 11, quoting the "representative of the immigration and quarantine convention": "The South has developed more in the last decade than all other States of the Union besides, and this with the disadvantages of a woeful war and the arrival of a class of immigrants who were only a detriment to the country. The South has been made a dumping-ground for the worst class of immigrants, and an awful scourge is now sweeping over the country as a result. It is our duty to protect our citizenship from this influx of the scum of Europe, which fills our poorhouses and our jails, and is a menace to our country."

Promotion of the affair October 15, in a bimonthly sheet issued at Chattanooga, referring to one month's arrivals of Italians: "That one month's arrivals from that one nation was sufficient to have demoralized the entire labor situation throughout the South, to say nothing of the other nationalities that showed such large numbers. Of these, practically the entire number were 'laborers' not having funds enough to settle themselves without probability of immediate work. We have it from authentic sources that there are now several shiploads awaiting the breaking up of the yellow fever to be sent to New Orleans, and who may be expected there within the coming winter unless prompt action is taken to prevent it. These are matters for the approaching conference to consider, and it is one of more serious moment to the entire South. One month's arrivals is sufficient to fill the labor demands of the South on any kind of a basis, and to say that the South should have these in unlimited numbers is simply inviting the worst conditions the South has ever known."

The Chattanooga *Times*, October 30: "The discussion of immigration at this conference is expected to be far the most important that has ever been had."

**The Thwarting.**

What really happened? Following a few wild outbursts in addresses of welcome, etc., on the subject, the lid was apparently put upon the subject of immigration in the conference, which was left to adopt the following:

"It is the sense of this conference that it does hereby greet and welcome to our midst all industrious and upright white persons from any of the European coun-

and advertising for that road two years, and then I spent two years in the Northwest as district passenger agent of the same road, utilizing most of my time giving lectures and inducing folks to go South.

"I have secured a tract of 5317 acres coming to within a few rods of the depot at Deer Park, Ala. The Mobile & Ohio runs for six miles along one side of the tract. We shall put out 500 acres of fruit as fast as we can get the land cleared and the trees set out. We shall set mainly peaches, but shall have at least 100 acres of summer apples. On each acre of peaches we shall set a number of pecans, and when the peach trees are gone we hope to have enough pecans to 'keep the wolf from the door.' As soon as we can get the land fenced so we can keep dogs out and the sheep in we shall keep as many sheep as circumstances will warrant. I have three grown sons interested with me in the deal, and the success will be due to their energy and help."

### NASHVILLE'S SOLID GROWTH.

#### Many Proofs of Its Substantial and Steady Progress.

[Special Cor. Manufacturers' Record.]

Nashville, Tenn., November 10.

By using the extravagant terms which are necessary to describe Nashville's present rate of growth the impression is likely to be created that the bombastic methods of the industrial "booster" are being resorted to. That is not the case. Nashville's conservatism has long been something of a bugbear to the more progressive and aggressive citizens. During the past 18 months particularly the investors have been breaking away from the precedents previously established, and the result of that tendency has been a pronounced and highly profitable activity, which has been, however, up to the present time conducted with rare good judgment. Confidence in the permanence of these conditions rules strong, and the shallow nature of a realty "boom" are nowhere in evidence.

One of the best indications of solid growth is the eagerness and rapidity with which the wage-earning contingent and the men of small income are securing homes which they can call their own. Four large land companies and a number of smaller ones are conducting a large and remunerative business in suburban property. The four large companies are operating in the sections known as West Nashville, the Murphy addition, or West End, Belmont Heights and Eastland. In each of those localities from 50 to 100 new homes have been built within the past year, and as many more are projected or now in course of construction. Those figures are meant to include only the operations of four companies, and do not embody the records of individual transfers or the volume of business transacted by the real-estate agents of the city.

A feature of all this residence construction which is attracting much attention is the introduction of concrete blocks as building material. No single instance has yet been called to public attention where the blocks have failed to fulfill their mission in residence construction in this city, except in the point of appearance. That is a defect which has been criticised, but after all it is only a matter which experience in concrete architecture may overcome—that being a comparatively new problem for the skill of local architects. A number of this style of homes have been built, however, to the entire satisfaction of their owners. Some of them were built by the manufacturers of the blocks as model houses and have stood the test.

The use of concrete building material has reached the highest art in this city in the construction of the First National

Bank Building, a 12-story office building with basement, which is at this time nearing completion, the inside work alone remaining to be done. The first floor, which will be occupied by the First National Bank, is of artificial stone, but its solidity and handsome appearance compares very favorably with similar structures in stone.

The possibility of criticism in residence construction on account of the appearance of the concrete, which was mentioned above, does not apply to industrial building. In the latter particular Nashville has set the pace for other Southern cities by the erection of the only concrete elevator in the South except in New Orleans. The elevator has just been completed and turned over to the Nashville Warehouse & Elevator Co. by the Macdonald Engineering Co. of Chicago. The formal opening of the plant will take place during this month on a date to be decided later. At that time the business men of this city and the patrons of the Nashville Warehouse & Elevator Co. from various points in this section will be given a practical demonstration of the plant's operations. They will see grain cars unloaded by power scoops in from three to five minutes, and will see the same grain loaded back into the same cars or other grain into different cars almost before they are aware that the original car has been unloaded. They will see also the manner in which large quantities of damp or tough grain is reclaimed by being run through a pneumatic drier. The drying plant is the largest in the South outside of New Orleans, having a capacity of 1200 bushels per hour. It was built by the Hess Warming & Ventilating Co. of Chicago.

The elevator has a capacity of 275,000 bushels, and introduces a new feature in concrete elevators. Its bins are each of small capacity, while all concrete elevators previously constructed have been of the large-bin type. For elevator owners who are also grain dealers the large bins are more profitable, for the reason that the elevator derives gain from every point which the grain appreciates in quality while stored. The Nashville Warehouse & Elevator Co., however, does not buy and sell grain, but derives its profits solely from storage charges. For that reason the small bins are preferable, as they allow each lot of grain to be stored separately and each patron secures the increment in his own grain or sustains the loss if there should be a loss.

The development of Nashville as described in this article embodies only a few of many points. There is hardly a block in the heart of the city without its new office or mercantile building in process of construction or projected. The building activity extends in proportion to the suburbs, and new works and factories are being constantly announced.

HAYNES MCFADDEN.

### To Advertise Texas.

A year or more ago representatives of the business interests of Northern and Eastern cities paid a profitable visit to Texas, and the results of their observations were embodied in a volume valuable as an advertisement of the resources of that great State. In return, the Dallas Commercial Club is arranging for a trip by special train of about 75 of the leading business men of Dallas, Fort Worth, San Antonio, Austin, Waco, Galveston, Sherman and Paris to St. Louis, Cincinnati, Pittsburgh, Washington, Baltimore, Philadelphia, New York, Boston, Buffalo, Cleveland and Chicago as an additional advertisement of Texas.

The assessed value of property at El Paso, Texas, is \$13,578,987, an increase of more than \$1,300,000 over last year.

tries, and from all sections of the United States, who wish to make their homes with us, to assist in the development of our resources and the advancement and multiplication of our varied enterprises and industries.

"We repudiate and denounce as untrue any and all rumors and slanders that may have been circulated to the effect that the South is unfavorable to honest and industrious white immigrants.

"Whereas, the President of the United States has recommended to Congress the passage of certain changes in the present immigration laws of this country with a view of making it more difficult for the pauper and criminal classes to enter our country, this recommendation embraces a better system of immigration both at the ports of embarkation and arrival; therefore, be it resolved by this conference of representative men of the South, that we hereby indorse and approve these recommendations, and request all of the senators and representatives of the Southern States to aid in securing the passage of such amendments to existing immigration laws as will tend to obtain the objects sought.

"This convention recommends to each of the Southern States the establishment of an immigration bureau, to be maintained by sufficient appropriation."

Which is very, very far away from "a policy for the exclusion of foreign immigration."

What of the convention as a body?

The call of September 16 said: "We designate the following persons as those expected to compose and participate in the conference: Governors of Southern States, members of Congress, commissioners of agriculture, mayors of cities, representatives from national, State, county and city boards of health, one representative from each railroad, preferably the emigration agent, the editor, publisher or operator of newspapers, and not more than five representatives from each commercial organization."

Upon this expectation, issued in perfect good faith, was built up a series of romances which were sent or suggested from Chattanooga, and some of which were published in good faith. It was the same old familiar song and dance, with its anti-climax.

#### The Dreams.

Charleston, S. C., October 17.—"Wives and female members of the families of members will be welcomed by the local committees and admitted to the sessions of the conference."

Birmingham, Ala., October 23.—"Word has been received from all the governors who signed the call, and with one exception they have pledged themselves to be present. The delegates also will include almost the entire Southern senatorial and congressional membership. A number of commissioners of agriculture have likewise signified their intention of being present, while more than one hundred representatives of boards of health throughout the South will attend. The immigration agents of practically all of the railroads in the South will be present."

New York, October 23.—"Upward of 1500 delegates are expected."

Chattanooga, October 30.—"Assurances have been received from hundreds of leading men in the South—governors, officers of chambers of commerce, lay delegates appointed by competent authorities and from fifty representatives of leading railroads—that they well be present."

"The entertainment committee announces that it has already secured \$500 in subscriptions for the purpose of entertaining the delegates, but considerable more is needed, and it is expected that the various members of the committee will

occupy themselves in increasing this sum. The meeting will bring to Chattanooga the most representative gathering that the South has ever known."

Chattanooga, October 31.—"Hon. Jos. W. Folk, governor of Missouri, will be one of the most conspicuous figures at the conference, and perhaps no one will attract more attention, for he has become a national figure. Governor Folk is a native Tennessean, and declined some very pressing invitations to deliver addresses in other States in order that he might be present at this conference."

Chattanooga, November 2.—"Fifteen governors will be here with strong delegations."

Chattanooga, November 4.—"There is every indication that the conference will be attended by at least five hundred men. The governors have selected the most representative men of their States to be here."

Charleston, S. C., November 6.—"The conference is destined to become historic in the physical and commercial development of the whole South."

Chattanooga, November 7.—"Ten governors of Southern States will attend the conference, and at least four other States will be represented. About fifty congressmen and United States senators from these States will also participate in the conference. Mayors of the leading cities of the South and editors and publishers of the leading newspapers will also be here. Leading lines of railway will be well represented, and boards of health in every State are showing their interest in the question of quarantine legislation by sending delegates."

Louisville, Ky., November 9.—"The governors of nine Southern States are already here or will arrive within a few hours."

New York, November 9.—"The National Government is unofficially taking an active interest, and many Northern and Eastern cities are sending representatives."

Richmond, Va., November 9.—"There are to be in attendance no less than ten governors of Southern States, together with sixteen United States senators, forty-six congressmen and a veritable host of mayors, leading editors, railroad representatives and other occupying important positions in public or private life."

Mobile, Ala., November 9.—"Thousands of persons from every part of the United States and some from Canada are on the grounds, and it promises to be the most important meeting ever held in the South."

Chattanooga, November 10.—"Be it resolved by this conference of representative men of the South."

New York, November 15.—"The Chattanooga *Times* remarks that the whole South is to be congratulated upon the result of the conference of the governors of 14 States upon the regulation of quarantine. As the conference was summoned under the auspices of this newspaper, it is gratifying to learn upon its authority that the result is so satisfying."

Which, published without intent to be humorous, ought to settle it. But—

#### The Realities.

The names of 450 appointed "delegates" got into the papers. These did not include a host of editors and publishers of newspapers, representatives of colleges and agricultural institutions, executive officials of 50 railroads and the "wives and female members of the families of delegates." Quite a number of "delegates" named, notably in Virginia, North Carolina, Maryland, South Carolina, Florida, Mississippi and Louisiana, failed to come to the surface at Chattanooga. But of the total number, 275, reported on the

second day of the "conference" as registered, 13, including 5 from Ohio, 3 from the District of Columbia, 2 from New York and 1 each from Illinois, Massachusetts and England, may be dismissed from the statistics, as they had personal schemes to promote, had no "vote" or were mere lookers-on in Venice.

The remaining 262 came from 13 Southern States and Missouri. Texas did not seem to appear at all. Texas is busy.

Of the 262, three-fourths, or 195, came from five States, Tennessee furnishing 75, Louisiana 49, Georgia 28, Alabama 22 and Mississippi 21.

The other States were "represented" as follows: North Carolina 19, Kentucky 16, Maryland 7, Florida 7, South Carolina 6, Missouri 4, Arkansas 3, Virginia 3 and West Virginia 2.

The "delegates" hailed from 103 communities. More than half of them came from 11 cities, 40 of Louisiana's 49 coming from New Orleans, 45 of Tennessee's 75 from Chattanooga, Knoxville, Nashville and Memphis, 17 of Georgia's 28 from Atlanta, 10 of Kentucky's 16 from Louisville, 13 of Alabama's 22 from Huntsville and Mobile, 7 of Maryland's 7 from Baltimore, and 5 of Mississippi's 21 from Meridian.

How "representative," then, the gathering was, in spite of its own solemn resolution that it was representative, appears in the fact that in the 14 States having delegates from 103 communities there are more than 3000 incorporated places naturally interested in any businesslike movement affecting the interests of the South.

At least one-twentieth of the business organizations of the South were also "represented."

Seven of the governors of the 15 States involved were there, the absentees being the governors of Maryland, South Carolina, Alabama, Texas, Arkansas, Kentucky and West Virginia.

The great drawing card for the promotion, aside from the proposed "banquet," was Governor Folk of Missouri, a native of Tennessee and now a national figure. It was not until the day before the opening of the "conference" that the Chattanooga *News* announced: "Governor and Mrs. Folk of Missouri will not be present."

Two senators of the 28 in the 14 States and perhaps a dozen of their 120 congressmen were on hand. Senators and congressmen are getting ready for the real work of Congress.

Yet some one had the nerve to furnish to the country's press at the end of this gathering of 262 delegates, three-fourths of them from 5 States and more than one-half of them from 11 of the more than 3000 incorporated places in the territory involved, this statement:

"Fourteen Southern States today, through their governors, senators, congressmen and other representative citizens, made their wishes known regarding the relations of States to the Federal Government in the matters of quarantine and of immigration."

#### Ballooning.

The birds kept up their singing even in the midst of the conference. Of course, the program was not carried out. It never is. But the oratory! We are indebted to the luxuriant imagination of the Chattanooga *Times* for its description, as follows:

"Most notable gathering the South has ever known began its work with a series of addresses whose brilliance have seldom been equaled and which came from the lips of the greatest men in this section of the country today."

"The delegates were engaged in listening to the most brilliant orators that this section has produced."

"It may be said that yesterday was

given over to oratory, but it was of a saner kind that leads to wise and intelligent action."

"Governor Vardaman made a most brilliant speech, taking occasion to pay a tribute to the women of Tennessee that may well be compared with the gems of brilliant oratory. His peroration on the Tennessee woman was a particular gem, and was thoroughly appreciated by his hearers. Charles P. Lane of the Huntsville Chamber of Commerce replied on behalf of the commercial interests with sane advice delivered in ringing phrases that stirred the conference again and again. Governor Robert B. Glenn, the eloquent son of North Carolina, delivered a most notable speech, in which he thrilled every Southern man, brought laughter and tears alternately, and drew burst after burst of applause from his hearers, which ended in a perfect ovation when he had taken his seat. A few minutes later, when he stepped toward the front of the platform for a drink of water, Governor Glenn was again cheered."

#### The Collapse.

What was it all about? Consider a few specimen chunks of oratory. Hear Governor Vardaman, who said:

"My friends, I was struck with what Senator Frazier said about the women of Tennessee. (Laughter.) I had the pleasure of seeing several, and passing them on the streets on yesterday. I know a great many women in Tennessee, and when I rode over this magnificent little city on yesterday I imagined that it must have been some place like this that the Great Creator came to, on this earth, after having made the sun to scintillate in space, giving life and light to all that is, after having chiseled from the rugged face of this old earth, these cloud castling mountain peaks, snow-capped, sending from their sides the limpid streams that gather force and body as they go down until at last they merge with the river and their upon their bosoms float the commerce of the world. After studding the stars, living reflectors of God's impartial love for man, after He had made the violet and borrowed from the rainbow its delicate hues with which to paint its petals, and then breathing into it the Divine perfume of Paradise, I say after He had finished it all, He took counsel of the multitude of all things. He borrowed suggestions, after seeing something was lacking, He had made man, but something was lacking; after He had taken an inventory of His handiwork, borrowing, I say, from the sun, borrowing suggestions from the blue of the heavens, the sparkling of the stars, the zephyrs, I say, He took counsel of all of these things, He then gave to the world the one splendid embodiment of all that is good, beautiful and true in the form of a charming Tennessee woman. (Tremendous applause.)"

Hear Charles P. Lane, who said:

"While it is true we are looking to the future, but still, my countrymen, let us not forget the past, and to honor the past. Let us not forget, my countrymen, when we begin to consider this great question of foreign immigration, that you and I are the descendants of the highest caucasians under God's sun. Let us not forget that a legacy was transmitted to us by our forefathers, the legacy of the pure and blue-eyed Saxon. Let us not live alone in the present, but let us transmit to our children the same great legacy and matchless citizenship, such as we received from our ancestors. While I favor immigration, and while I realize the fact that there is room for 25,000 able-bodied men to work in Alabama, I at the same time feel the importance of the trust invested in me as an American citizen, to guard well

the standard, to degrade the standard, to inherit the standard, to hear the standard, to would the standard, to fancy to the standard, to me, of the standard, to down on the standard, to mississippi and under his standard, to massive weight, it was in beauty, various roses, sweet lilac, well-kept, thinking tune of the dies of the trees were ever given of plenty of pines. Then how king, his the misery, the fair sweethearts, suit to the and with the plause.)"

And the but what is revealed nooga *Times* "One of the conference on 'Citizens'abilities,'" collector of the one of the educators time, conference his address. "E. J. State do merce and South Ca portant conference of time, the confere In fact, threw the and David and such mentous the hearting especially from Ch into above proceeding tolls are And the The of struc future the intention recurren pe the and era would be To be would te

was of a  
nd intelli-  
most bril-  
to pay a  
ee that  
e gems of  
on on the  
ular gem,  
ed by his  
e Hunts-  
replied on  
ests with  
g phrases  
gain and  
glen, the  
delivered  
he thrilled  
ghter and  
rst after  
rs, which  
n he had  
tes later,  
nt of the  
Governor

der a few  
ear Gov-  
ith what  
omen of  
he pleas-  
them on  
a great  
when I  
city on  
ust have  
the Great  
fter hav-  
in space,  
is, after  
face of  
ng mount-  
ing from  
t gather  
until at  
nd their  
orce of  
ars, liv-  
love for  
slept and  
delicate  
als, and  
perfume  
finished  
itude of  
s, after  
He had  
acking;  
of His  
om the  
he blue  
e stars,  
el of all  
rom all  
the world  
ll that  
form of  
fremen-  
1.  
to the  
let us  
e past,  
when  
I are  
ensions  
et that  
by our  
re and  
one in  
to our  
match-  
I from  
migra-  
there  
en to  
the feel  
ed in  
well

the standard of our citizenship, and not degrade the legacy as gentlemen that we inherited in the past."

Hear Governor Glenn, who said:

"Would to God today I had the poetic fancy to tell you men, who are here before me, of those ideal southern plantations down on the Mississippi, in Georgia, Mississippi and North Carolina, situated on yonder high hill, with its broad porches, massive white columns and green blinds, it was indeed a thing of comfort and beauty. With its well-kept garden, luxurious roses, beautiful hyacinths and little sweet lilies of the valley, with the towering elms casting their shadow over the well-kept grass growing abundantly, coming gently down to the fields of corn, tobacco and rice to the little stream as it sang merrily on its way to the great ocean beyond. Over and beyond were the little villages of the happy, careless and indolent negro, unmindful of tomorrow, thinking only of today, dancing to the tune of the old banjo, singing sweet melodies of the old southland, and believing, as was true, that the old massa and old missess were the greatest people that God ever gave to any country; they were days of plenty and of peace, sunshine and happiness. Then, every man's home, no matter how humble, was his castle, he the king, his wife the queen, and woe be unto the miserable miscreant who dare slander the fair name of wife or daughter or sweetheart, for he answered not to the suit in court for damages, but he answered to the anger of the father, son or husband with the shotgun or cowhide. (Applause.)"

And there were others on the program, but what became of them? The tragedy is revealed in these words of the *Chattanooga Times*:

"One of the most interesting features of the conference promised to be the address on 'Citizenship, Its Duties and Responsibilities,' by Dr. Robert S. Fulton, chancellor of the University of Mississippi, and one of the most distinguished of Southern educators. On account of the amount of time consumed in other speeches it was not delivered.

"E. J. Watson, commissioner of the State department of agriculture, commerce and immigration of the State of South Carolina, was one of the most important speakers on the program of the conference, but, on account of the amount of time consumed in oratory by others, the conference adjourned before it reached his address.

"One of the most important addresses on the program of the conference, and which was not reached on account of lack of time, was the address of Dr. William F. Bruner of Savannah on 'Quarantine, Government Control.'

In fact, the oratory, which simply threw the memory of Calhoun and Clay and Davis and Toombs and Patrick Henry and such like in the shade, was so momentous that it must have almost broken the heart of the country's papers, enjoying especial facilities for being stuffed from Chattanooga, to be obliged to condense the rhetoric of at least 10 orators into about 3000 words covering all the proceedings of the two days. Telegraph tolls are costly.

And the end.

The officers of the convention were instructed to agree on a time and place for a future meeting of the conference, with the intent that it shall be made of annual recurrence. Why? It is too much to expect the South to engage in epoch-making and era-creation every year. The result would be a surplus of eras and epochs. To be sure, such annual recurrences would tend to a cultivation of that "poetic

fancy" for which Governor Glenn sighs, and the instruction might give him the chance for relief from that "Southern Industrial Parliament" which he, single-handed and alone, but with the sympathy

of the "Titular Bishop of Juliopolis," has cherished since it wilted last May, by grafting it upon another dream. But the real business men of the South have passed the stage of talky-talky.

## RECLAMATION OF THE ST. FRANCIS VALLEY.

By JOHN A. FOX, Secretary St. Francis River Improvement Association.

[Written for the Manufacturers' Record.]

The St. Francis valley is one of the large subdivisions of the Mississippi valley. The entire valley of the Mississippi, or what are known as the alluvial lands, comprises about 30,000 square miles of land in the States of Missouri, Kentucky, Tennessee, Arkansas, Mississippi and Louisiana. That portion which lies in Arkansas and Missouri, consisting of about 6000 square miles, is known as the St. Francis valley. Most of this area, in fact all of it except a small strip along the bank of the big river, was for ages prior to 1893 subject to the great floods of the Mississippi river. The silt-bearing waters would begin to pour into this valley whenever the government gauge at Cairo registered a stage of 44 feet and completely submerge it for three or four months in the year. Here such water as did not find its way into the St. Francis river, and thus eventually back into the Mississippi river, would remain in large lakes and depressions until evaporation and absorption removed it in the late summer. As may be supposed, the land was greatly enriched by the silt, which was left on it from four to five feet deep all over this vast area, but no permanent habitation could be established on account of the water.

In 1893 a large number of the owners of this valley land secured the necessary State legislation to form all of this submerged land into a taxing district to raise funds for the purpose of constructing a levee or dike along the banks of the Mississippi river that would confine the water to the channel of the river and prevent the overflow of the lands. More than \$1,000,000 were raised by the issuance of bonds on the lands in the protected area, and this fund, augmented by certain appropriations made by the general government amounting to about \$250,000 and expended through the Mississippi river commission, have enabled the landowners to build a very substantial retaining wall along the entire river-front of this St. Francis valley from New Madrid, in Missouri, to near Helena, in Arkansas. A tax of six cents on each acre of land thus protected from the flood is paid annually to defray the expenses of operating, pay the interest and to create a sinking fund to provide for the bonds when they become due.

The levee has just been completed within the last two or three years, and this vast fertile section of the two States of Arkansas and Missouri thrown open for development. About the time the levees were completed, however, it was discovered that the natural streams in the valley, which had formerly been gorged with flood waters, were obstructed with drift, fallen trees and vegetation, so that they were incapable of removing the rainfall sufficiently rapid to enable all of the land protected by levees to be utilized. The area comprising the valley is about 200 miles in length and about 40 miles wide at its greatest breadth. It is apparently as level as a board, but there is a slope to the westward of about eight inches to the mile, with an additional dip southward of about six inches to the mile. This gives the land a general southwesterly slope, causing all of the rainfall to find its way into the St. Francis river, which flows

southward through the valley and finally empties back into the Mississippi river, the slope being sufficient to prevent the flood waters from the river flowing around the ends of the levee and entering the valley from below. It was evident, therefore, that before there could be any complete development of this valley some steps would have to be taken to have this main stream opened, especially as the rainfall in this valley is so excessive, it being about 54 inches on an average. As it is a watercourse maintained as navigable in law by the general government, it would seem that the government should not be unwilling to endeavor to make it navigable in fact. If it could be made navigable in fact two purposes would be served: A natural waterway provided for commerce and a natural outlet for drainage. The individuals who own the lands are being heavily taxed for the levee, and must be taxed to dig canals leading to the St. Francis river, and it does not seem just that they should bear the additional enormous expense of improving this natural watercourse. With this problem confronting them, a number of prominent citizens met at Jonesboro, Ark., on May 5, 1903, and organized an association whose object is to unite all of the interests in this valley for the purpose of opening these natural watercourses. The organization now has more than 2000 members who contribute \$1 per year as membership dues. This is expended in gathering data, obtaining statistics, publishing maps and pamphlets and defraying the expenses of committees sent to confer with State or government authorities. This association, now known as the St. Francis River Improvement Association, pays no salaries and has no politics, but meets twice each year for general business and to discuss what is best for the general good of the whole valley.

It has assisted in framing better drainage laws in both States; it has assisted by its kindly effort in the formation of drainage districts in the various counties comprising it, and it is now preparing statistics and data to submit to Congress for the purpose of convincing that body that the general government should dredge and straighten the St. Francis river.

The following general description of the whole valley is given, with a few facts concerning the river and the land immediately adjoining it, so that those interested in this may see the merit in the claims of the association.

As stated at the beginning of this article, this immense area was practically a wilderness when the levee movement was started, there being only a narrow strip of land along the high banks of the Mississippi river in cultivation at that time. As the levees were built southward from the Missouri end of the valley, however, the large forests there began to be invaded and saw-mills were established as soon as protection was afforded. These have been scattered throughout the entire area of the wooded portion of the valley and have constantly moved southward as the levees were extended. The wooded area comprises more than 2,000,000 acres, and, now that protection is afforded, the timber is being removed very rapidly from the entire area. Last year there were shipped

out more than 300,000 carloads of lumber

manufactured from the various hardwood varieties of timber, such as cottonwood,

gum, oak, elm, sycamore, ash and hickory.

Staves are manufactured in large quantities for slack barrels from the small trees

which remain after the saw-log stock is

exhausted, and hundreds of carloads of

ash handles are shipped for domestic and

export use besides. This enormous traffic

has invited the construction of railroads,

now made possible because of the protec-

tion afforded from overflow, and more than

700 miles have been built throughout the

valley within the last few years. These

ramifying lines through a rich agricultural

country being thus rapidly bereft of

its forest have led to the settlement of

numerous homeseekers, who find a perfect

gold mine in the rich soil thus exposed.

Consequently the cultivated area is rap-

idly expanding, and small growing towns

are manifest everywhere throughout the

whole valley.

In order to understand the relation of the St. Francis river to this rapidly-developing area one must bear in mind that all of the land slopes toward this river, the greatest extent of which lies on its east side. The river enters the valley from above through a gorge in Crawley's Ridge, the high range of hills which forms its western boundary about two-thirds of the distance up from its lower end. Although the length of the river from this point of entrance to its junction with the Mississippi river is only 132 miles in a direct line, yet so tortuous is it that the distance between these two points is by the river itself more than 225 miles. In addition to this, the river was disturbed in its course during the earthquake of 1811, so that for nearly 50 miles in the vicinity of the State line between Arkansas and Missouri the channel is completely obliterated, there being left a broad shallow marsh grown thick with water weeds and dead tree tops. This renders navigation between the upper and lower river impossible and thus destroys the value of the stream as a commercial highway. To open this part of the river and restore it to a state of usefulness will cost about \$2,000,000, but note the following benefits that will accrue:

There are nearly 750,000 acres of virgin forest along this river from where it enters the valley to its junction with the Mississippi river that could be transported by the river if it were open. This will furnish for transportation at a very low estimate 3,000,000,000 feet of timber within the next 10 years, which, at 50 cents per 1000 feet, the difference between rate by water and rate by rail, would amount to \$1,500,000, or a saving on the timber alone of more than one-half the cost of the work. Besides this, the improvement of the river would prevent its water from overflowing many thousand acres of adjacent land on account of the drifts, logs, fallen trees and weeds which impede it through the 50 miles above alluded to. The dredging for navigation would serve the dual purpose of letting the water down into a deep bed instead of allowing it to spread out over a shallow one, thus bettering commerce by a deep channel and bettering the rich territory adjacent by preventing its overflow. Estimating then, that in the 10 years after such an improvement there would be 500,000 acres of land in cultivation along the river offering their products for transportation, we would have, according to the yield elsewhere in the valley where land is in a state of cultivation, more than 300,000 tons of produce for annual transportation. Put the difference in rate on this at 50 cents per ton, and a saving annually of \$150,000 will be shown.

The impression that the landowners, in

endeavoring to have this river improved by the general government, are seeking public aid for the drainage of their lands will be dispelled when the public understands that these landowners are now improving at their own expense the smaller streams that empty into this river, and are spending millions of dollars in constructing new canals. As before stated, there are already completed more than 500 miles of these canals. They discharge into the bayous and smaller tributaries of the St. Francis river, but are not as effective as they would be if the river itself were not so congested. When the St. Francis river shall have been improved it will pave the way for the complete opening up of all of its tributaries that ramify throughout the entire valley, and thus throw open for development more than 2,000,000 acres of this rich valley that cannot now be utilized.

A bill will be introduced in Congress this winter asking for an appropriation of \$2,000,000 to carry out this most laudable undertaking, and it is hoped that the members of the coming Congress will see fit to afford the liberal encouragement and support so greatly needed for the internal improvement and development of this growing middle West.

#### FOR ALABAMA'S PROGRESS.

##### Annual Meeting of the State's Commercial and Industrial Association.

One of the most important resolutions adopted at the annual meeting last week at Decatur of the Alabama Commercial and Industrial Association was the following:

"Whereas, representing, as we do, collectively, the commercial organizations of the State of Alabama, the first on the roll-call of the nation, the first in undeveloped mineral wealth and the first in the high and noble impulses and aspirations of citizens; and

"Whereas, we realize that we are fast developing and that we can see in not distant future that we will be among the first in the race for commercial supremacy, and that the amount of the result will necessitate a continued development of the vast resources which are hidden in the depth of our hills, yet unattained on the surfaces of our plains and in the heat of our woodland; and

"Whereas, we deplore the methods which have recently been employed, as we think, to stifle a continuation of prosperity and growth of the entire country, more especially the South; now, therefore, be it

*Resolved*, That we, the Alabama Commercial and Industrial Association, in annual meeting assembled, do desire to express our appreciation of the patriotic stand taken by such vast majority of the delegates at the recent interstate commerce law convention, held in Chicago, in declining to become parties to such means as were contemplated to lessen the possibility of the natural growth of the country and minimize the power of that greatest of developers, the railroads of our country, whereby these agencies for good would be at the mercy of a political faction rather than under the control, as is now the case, of their rightful and legal owners.

*Resolved further*, That while no State in the Union respects more than does Alabama the wishes of the President of the United States, whose accomplishments will henceforth shine on the pages of history, and no conquest as more complete than was his conquest of the South, we think he does not wish to be an advocate of any policy which will have a detrimental or retarding effect upon any section of the country, and while we coincide with his ideas to do away absolutely with every form of discrimination by the rail-

ways by method by which they are brought, we do not think he contemplates anything that will stop the onward march of prosperity in this greatest nation of the earth."

In his annual report Secretary L. L. Gilbert made an urgent plea for advertising the resources of Alabama, and, referring to an incident of the convention of 1904, said:

"The sending of telegrams direct to the executive officers of some of the largest industrial concerns in the United States at the last annual meeting of this association proved a splendid medium of advertisement for Alabama. The telegrams were sent to the following well-known manufacturing concerns:

"Draper & Co., Hopedale, Mass.

"Crompton-Thayer Loom Works, Worcester, Mass.

"American Locomotive Co., New York city.

"International Power Co., New York city.

"Fairbanks Scale Works, New York city.

"American Supply Co., Providence, R. I.

"British-American Manufacturing Co., Providence, R. I.

Responses were received from every one of them, indicating the high appreciation of the information given them and expressing in highest terms their interest and confidence in the future development of industrial Alabama. One of the largest of these concerns has been negotiating for many months in reference to the establishment of a branch in Alabama, and without doubt a large investment in this State will eventually result."

He insisted that practical plans should be devised, moreover, to bring thrifty agriculturists and intelligent laborers into Alabama. On that point he said:

"We need both desperately. Thousands upon thousands of acres lie idle in Alabama today simply for want of adequate cultivation. Our productive capacity is limited immeasurably to secure competent tenants or farm operatives. Our agricultural wealth should be increased fourfold in the next decade with sufficient labor. Our lands would increase in taxable value and the State treasury would be annually enriched. In securing desirable agricultural immigration the State authorities should and would actively co-operate. The immigration committee of this association should take this matter in hand and with whatever funds might be available, supplemented by adequate State aid, send a native representative into the agricultural districts of Norway, Sweden, Germany, Denmark, Switzerland and Northern Italy. Another agent might well be sent into the northern sections of our own country; the expense would not be great. Some day we may learn that Southern cotton fields need Chinese laborers as much as Chinese laborers need Southern cotton products.

"As for laborers in general, our great demand in the factories, the mills, the mines, the railroads and public works are unable to be met by at least one-half, and many an enterprise has been indefinitely postponed simply for lack of sufficient labor. The increased activities of the industrial centers have largely depopulated the agricultural sections, and yet the supply is inadequate. The general opinion seems to be that raising a negro's wages simply shortens his days of service in the week. If he can earn a living in three days, why work six?

"To aid in relieving this situation an entirely different committee, called perhaps a committee upon labor supply, might readily secure a list of the corporations needing hands, the number desired by each, the rate of wages paid and the

general conditions of employment. From each corporation a monthly contribution could be secured proportioned to the number of laborers desired, sufficient to keep an active agent in the Eastern field or elsewhere continuously at work recruiting able-bodied men and women for work in Alabama's industrial field. The expense being adjusted according to numerical needs and apportioned among perhaps 50 corporations would bear lightly upon each one and at least prove a most inexpensive experiment."

The association elected as officers for the following year Messrs. A. G. Forbes of Montgomery, president; J. E. Pierce of Huntsville, secretary and treasurer; Leslie L. Gilbert of Montgomery, secretary, and James H. Edwards, Decatur; Rufus N. Rhodes, Birmingham; T. S. Kyle, Gadsden; J. H. Bankhead, Jasper; W. R. Peacock, Selma; Charles Henderson, Troy; John Craft, Mobile, and K. P. Wilson, Mobile, vice-presidents.

#### ALABAMA IRON INTERESTS.

##### Rumors of the Possibility of a Combination.

[Special Dispatch to Manufacturers' Record.]

New York, November 15.

Rumors of all kinds have been flying thick and fast regarding the possibility of a combination of Alabama iron companies. The steady advance in these stocks during the last few weeks gives color to the general belief that some quiet move is really being made to control these properties. I have the authority of a leading banker for the statement that a purchase of a control of the Tennessee Coal & Iron Co. has actually been made, but whether his information is absolutely reliable or not the future alone will disclose. Most of the rumors have been based on the idea that people interested in Southern railways or in the United States Steel Corporation have been absorbing the stock of one or two companies in order to prevent the possibility of these companies being controlled by unfriendly interests. On the other hand there is a rumor, accepted by some well-informed people, to the effect that the Republic Company has purchased the Tennessee and likely the Railway Steel Spring Co., leaving to the future the problem of securing the control of one or more of the other Alabama iron companies.

The very secrecy with which this movement, whatever it may be, is being carried on and the quiet but steady absorption of stock of the Tennessee and Sloss is accepted by many as proof that a deal will soon be put through. It may be that the Republic and Tennessee are to be united, and that the people who are working on the matter may have in view the possibility of making other purchases later on. At any rate, if it is true that the Republic is the buyer of the Tennessee, and some color is given to this by the fact that Moore & Schley, who are largely interested in the Republic, are reported as being heavy buyers of the Tennessee, the combination of these two companies alone would result in an organization which would have a very great effect upon the iron and steel industry of the whole country.

A committee of the Nashville (Tenn.) Chamber of Commerce is planning for the organization of a stock company with a capital of \$200,000 to encourage the establishment of manufacturing industries in that city by taking stock in new industries.

A board of trade has been organized at Live Oak, Fla., with Messrs. W. J. Hillman, president; C. D. Blackwell and C. H. Brown, vice-presidents, and C. A. Ridley, secretary and treasurer.

## MINING.

#### Additional Coke Ovens.

The Fort Smith & Western Railroad, A. C. Dustin, president and treasurer, Cleveland, Ohio, announces that it will begin immediately the construction of 100 additional coke ovens at McCurtain, I. T., increasing the capacity of the plant there from 7000 to 48,000 tons per month. Mine No. 3 will be opened, employing about 40 men in its operation. The company has also authorized the purchase of 100 box cars of 80,000 pounds capacity. It is said that the increase in production of the coking plant is occasioned by heavy demands for coke from smelters in Colorado, Mexico and Kansas City, and gas plants in Texas and Louisiana. Mr. W. F. Crane of Fort Smith, Ark., is general manager of the Fort Smith & Western Railroad.

#### Constructing Furnace.

In its steel department at Ensley, Ala., the Tennessee Coal, Iron & Railroad Co. of Birmingham is erecting furnace No. 11 at the southeast end of the battery to be connected with No. 10. An extension is building to the main structure 110 feet long which will be equipped with 30-ton crane girders. Part of the roof of the new extension is being so constructed that a panel may be removed to charge the new furnace with skulls and scraps accumulating from the other furnaces in the department. It is stated that the cost of the improvements will amount to \$25,000.

#### Georgia Ore Land Sold.

William Bell Lowe, mining engineer, 42 Broadway, New York, reports the sale to a strong syndicate of Pittsburg (Pa.) and New England people of 10,000 acres of hematite ore land 26 miles southeast of Rome, Ga., heretofore owned and operated to some extent by the Aetna Manufacturing Co. and others. This is known to be a very rich deposit of ore, low in phosphorus and running some 52 per cent. metallic iron. It is said to be the purpose of the new owners to extensively develop the property and to ultimately establish furnaces and other plants there.

#### To Purchase Coal Lands.

It is announced that the State of Tennessee will probably close negotiations for the purchase of additional coal lands within the next few weeks. The governor, with Prison Commissioners W. T. Murray and W. H. Hartford, recently made a trip of inspection and contemplate making another trip to investigate other lands offered. The purpose of the purchase is to provide additional coal-mining operations in order to utilize the labor of the convicts.

#### Deal in Mining Properties.

The announcement is made from Jasper, Ala., that R. C. Middleton, president of the Cane Creek Coal Co. at Calumet and the Atlas Coal Co. at Oakman, and associates, have purchased the mining properties at Brilliant, Marion county, Alabama, of the Aldrich Mining Co. for \$175,000. The operations are located on a branch line of the Illinois Central Railroad which extends from Winfield, on the St. Louis & San Francisco system.

The city of Chicago has purchased the entire output of the mines of the Beattyville Black Coal Co. of Beattyville, Ky. The daily production is about 10 cars, which will be shipped direct to Chicago.

The aggregate capital stock of new companies incorporated in Mississippi during the past two years, not including railroads, is about \$60,000,000.

[A com  
building  
Construct  
PROG  
Constru  
well'

In a

RECORD

Kansas

during t

engineer

of Decem

"Betw

0. T., 50

Knox

Las Tra

the city

Chihuah

the Gue

State of

west of

Fuerte a

Sonora,

more tha

the end

"Next

line eas

ably to

City. V

line sou

connection

wardly t

by the e

tinuous

Emporia

"In O

we will

meters e

kilomete

will also

kilomete

the mou

erly fro

1906 we

tended t

kilomete

"The

ing in a

1906 so

road th

time ca

The V  
been ch  
Springs  
long fro  
Texas.  
counties  
son, Me  
Sterling  
Lubbock

This,

south li

traverse

but wh

connect

Railwa

Texas,

E. P. S

ported

will be

dent of

of Big

Col.

is quot

the lin

number

Springs

that co

in the

structio

of Wes

rect co

The

E. P. S

## RAILROADS

[A complete record of all new railroad building in the South will be found in the Construction Department.]

### PROGRESS ON THE "ORIENT."

Construction Being Pushed on Stillwell's Kansas City and Mexico Line.

In a letter to the MANUFACTURERS' RECORD reviewing the work done by the Kansas City, Mexico & Orient Railway during the year, Mr. M. P. Paret, chief engineer of the company, writes that the company will have laid track by the end of December as follows:

"Between Fairview and Custer City, 0. T., 50 miles; between Sweetwater and Knox City in Texas, 75 miles; between Las Trancas and San Sostenes, east of the city of Chihuahua, in the State of Chihuahua, Mexico, 41 miles; between the Guererro river and Bocoyna, in the State of Chihuahua, Mexico, this being west of the city of Chihuahua and west of the town of Minaca, 50 miles; between Fuerte and Las Hornillas, in the State of Sonora, 10 miles. We may possibly lay more than this and at other points before the end of the year.

"Next year we expect to complete the line easterly from Wichita, Kan., probably to Emporia, and possibly to Osage City. We also expect to complete the line southwardly from Custer City to a connection with the line coming northwardly from Sweetwater, Texas, so that by the end of 1906 we may have a continuous line from Sweetwater, Texas, to Emporia or Osage City, Kan.

"In Old Mexico and east of Chihuahua we will probably complete 50 more kilometers east from San Sostenes, if not 100 kilometers. Also west from Bocoyna we will also probably complete a second 100 kilometers, or say, 60 miles additional in the mountains. On the west coast, easterly from Las Hornillas, during the year 1906 we will probably have the line extended to La Junta, a point about 200 kilometers from Topolobampo.

"There are strong prospects of our being in a position to finish during the year 1906 several hundred miles more of railroad than as above outlined, but at this time cannot speak definitely."

### West Texas Northern.

The West Texas Northern Railway has been chartered, with headquarters at Big Springs, Texas, to build a line 450 miles long from Kerrville, Texas, to Amarillo, Texas. It will run through the following counties: Kerr, Gillespie, Kimble, Mason, Menard, Concho, Tom Green, Coke, Sterling, Howard, Martin, Dawson, Lynn, Lubbock, Hale, Swisher and Randall.

This, it is said, will make a north and south line west of Fort Worth, and will traverse a country now sparsely settled, but which is rapidly filling up. It will connect with the Dallas & New Mexico Railway, now partly graded at Lubbock, Texas, and will also touch Plainview. Mr. E. P. Spears, promoter of the line, is reported as saying that actual construction will begin about December 1. He is president of the company, and W. P. Edwards of Big Springs, vice-president.

Col. J. D. Cunningham of Big Springs is quoted as saying that the building of the line is practically assured, that a number of wealthy business men of Big Springs are promoting the enterprise, and that considerable progress has been made in the preliminary arrangements for construction. It will place a large territory of West Texas and the Panhandle in direct communication with San Antonio.

The incorporators of the company are E. P. Spears, J. T. Pinson, J. W. Pierson,

John T. Witt, E. D. H. Caston, J. A. Wilhite, all of Dallas; Will P. Edwards, W. R. Cole, G. L. Brown, S. H. Morrison, all of Big Springs.

### North Carolina Connecting Railway.

Mr. T. F. Whittelsey, general manager of the Mobile, Jackson & Kansas City Railroad, writes from Mobile, Ala., to the MANUFACTURERS' RECORD concerning the North Carolina Connecting Railway Co., recently incorporated, and of which he is president. He says that the line, which will be about 90 miles long, has for its main object the development of the timber and agricultural resources of North Carolina, and incidentally the connecting of the principal railway trunk lines with the cross-country lines to facilitate the movement of coal and other products now taking long detours. The route has not been determined, but part of the right of way and roadbed of the old Roanoke Valley Railroad between Manson, N. C., and Soudan, Va., which is owned by this company, will doubtless be used.

As heretofore noted, this new road will connect the Norfolk & Western Railway with the Atlantic Coast Line.

The names and addresses of the officers and directors are as follows: T. F. Whittelsey, president, Mobile, Ala.; D. J. Nysewander, first vice-president, Homeville, Va.; D. W. Gunn, second vice-president, Roanoke, Va.; S. P. Douglas, secretary and auditor; R. H. Hood, treasurer, and W. H. Hood, director, all of Henderson, N. C.

### Growth of Texas Railroads.

The annual report of the Texas railroad commission for the fiscal year ended June 30, 1905, shows that 785 miles of lines are in course of construction and will be completed in two years as follows: Beaumont & Great Northern, Trinity to Onalaska, 25 miles; Galveston, Harrisburg & San Antonio, Stockdale to Cuero, 45 miles; Houston & Texas Central, Mexia to Navasota, 100 miles; Kansas City, Mexico & Orient, between Red river and San Angelo, 225 miles; Orange & Northwestern, Buna to Newton, 30 miles; St. Louis, Brownsville & Mexico, between Algoa and Refugio, 140 miles; Trinity & Brazos Valley, Mexia to Houston, 160 miles; Wichita Valley, Seymour to Stamford, 60 miles; total, 785 miles.

In 14 years there were 3091 miles added to the railroads of Texas, or an average of nearly 221 miles per year, or 35.07 per cent., while the increase in the United States for the same period was 28.08 per cent.

### Eddy Lake & Northern.

Mr. Robert B. Scarborough writes from Conway, S. C., to the MANUFACTURERS' RECORD that the Eddy Lake & Northern Railroad, of which he is one of the incorporators, will be built principally by and for the Eddy Lake Cypress Co., which operates a mill at Eddy Lake and owns fine bodies of timber lying northward of the mill for 20 miles in the direction of Marion, S. C. The latter is about 35 or 40 miles distant from Eddy Lake.

While the main object of the promoters is to handle timber, the road will be well equipped and operated as other railroad lines.

The personnel of the board of directors has not yet been determined upon.

Mr. W. M. Burge and Mr. Norman James of Baltimore are largely interested in the enterprise.

### New Oklahoma Line.

The Pueblo, Oklahoma City & New Orleans Railway Co. has been chartered in Oklahoma, with headquarters at Oklahoma City, to build a line 1050 miles long

from Pueblo, Col., via Oklahoma City to New Orleans; capital \$3,000,000. It is said that the line has been financed from Oklahoma City to Fort Supply, 150 miles, and actual construction will begin by January 1. The incorporators of the line are J. H. Wheeler, W. C. Burke, G. H. Dodson, R. T. Woodbridge and John H. Wright, all of Oklahoma City.

It is reported that the proposed Oklahoma & Northwestern Railroad, promoted by Henry Knapp of New York city, will also soon begin construction, perhaps before the end of the month.

### New Equipment.

An equipment agreement has been filed in Virginia covering the 20 locomotives, 1000 freight cars, 8 vestibule cars, 5 express and 5 mail and baggage cars ordered by the Seaboard Air Line, the engines to be built by the American Locomotive Co., the freight cars to be constructed by the Western Steel Car & Foundry Co., and the passenger, express and mail and baggage cars to be built by the American Car & Foundry Co. Blair & Co. of New York will furnish this equipment.

The Frisco system will, it is reported, receive 200 freight cars this month on an order for 1500 coal and box cars. Completion of the order will be hastened on account of the present car shortage.

### Pea River Valley & Gulf.

The Pea River Valley & Gulf Railway Co. has been incorporated in Alabama to build a line from Opelika, Ala., to Portland, Fla., about 100 miles, via Hartsboro, Geneva, Troy, Union Springs, Enterprise or Elba and DeFuniak Springs. The headquarters of the company will be at Troy, Ala., and the incorporators are W. H. Booth, president; J. V. Huff, vice-president, and D. A. Baker, general counsel.

It is said that the purpose of the promoters of the line is to connect it with railroad lines to Birmingham and to Atlanta. Portland is on Choctawatchee bay, and will, it is expected, prove a valuable seaport.

### Jasper & Eastern.

Mr. C. F. W. Felt, chief engineer of the Gulf, Colorado & Santa Fe Railway, writes from Galveston, Texas, to the MANUFACTURERS' RECORD that the Jasper & Eastern Railway has been built for 17.3 miles from Kirbyville to the Louisiana State line, and will probably be extended to DeRidder, La., 39 miles from Kirbyville, by the end of the year.

A 20-mile extension towards Alexandria, La., will be under construction soon, besides a 25-mile branch southeast to Oakdale.

### Liberty-White Extension.

Mr. W. M. White, general manager of the Liberty-White Railroad, writes from McComb City, Miss., to the MANUFACTURERS' RECORD that the company has built about four miles of an extension eastward from McComb, and will probably have three miles more finished next month. The extension will be 15 miles long. The company also proposes to put in gravel ballast on 25 miles of line, and to improve the grades and curves, this latter work to be done next year.

### South & Western.

According to a report from Anderson, S. C., the South & Western Railway of Bristol, Tenn., which is building an extension towards Spartanburg, S. C., is investigating with a possible view of further extending into Anderson.

It is also reported from Bristol that the company will reconstruct and revise its present line from Johnson City, Tenn., to Spruce Pine, N. C., 65 miles, reducing

curves and grades and putting in a number of tunnels.

### Street-Railway Deal at Montgomery.

A press report from Montgomery, Ala., says that the Montgomery Street Railway and all its properties, including the Montgomery Amusement Co., which operates Electric Park, has been purchased by the Montgomery Traction Co., of which R. D. Apperson of Lynchburg, Va., is president, and which is owned by a syndicate organized in Philadelphia. W. H. Ragland is general manager. Richard Tillis owned the Montgomery Street Railway, and W. J. Gunnivan was general manager. It has 26 miles of track, making over 40 miles for both companies.

### New Line for Tennessee.

The Knoxville, Sevierville & Newport Railway Co. has been chartered in Tennessee to build a line from Knoxville via Rockford and Sevierville to Newport, Tenn., about 50 miles. The incorporators are S. P. Condon, John B. Brabson, B. D. Brabson, Pryor Brown and Jerome Templeton.

### Railroad Notes.

The Livingston & Southeastern Railway of Texas has become a common carrier.

The New Orleans Belt Line Railroad is pushing construction, having laid track below Canal street as far as Conti street.

The Southern Railway Co. announces the appointment of Mr. James A. Smith, Jr., as traveling freight agent, with headquarters at Anniston, Ala.

A press report from Charleston, S. C., says that the promoters of the proposed connection with the Cincinnati, Hamilton & Dayton Railway, which was to have been extended to Charleston, have organized an industrial company to hold the valuable terminals acquired and thus secure them when required for any railroad which may build an extension into Charleston.

The Illinois Central Railroad has issued a tasteful folder concerning its train service in connection with the new steamship Prince Arthur, making a through route from Chicago and other cities via New Orleans to Havana. The steamer leaves New Orleans every Wednesday at 3 P. M., arriving at Havana early Friday morning; returning, she leaves Havana at 1 P. M. Saturday, arriving at New Orleans on Monday.

The Northern Central Railway Co.'s comparison of earnings and expenses for September, 1905, with the same month of 1904 shows gross earnings, increase, \$13,900; expenses, increase, \$54,700; net earnings, decrease, \$41,700. For the nine months ended September 30, 1905, as compared with the same period of 1904 the statement shows gross earnings, increase, \$145,400; expenses, increase, \$522,600; net earnings, decrease, \$377,200.

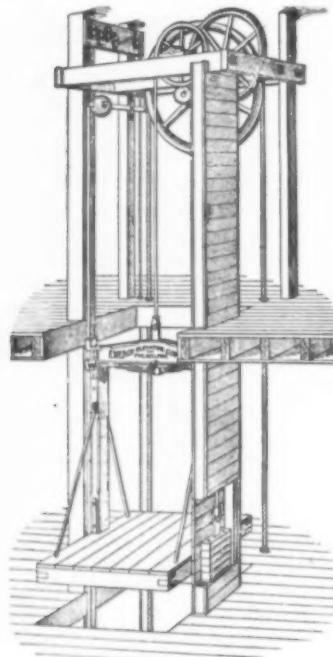
### Fertilizer Plant Completed.

The fertilizer plant of the Southern Fertilizer & Chemical Co. of Savannah, Ga., under construction at the Hutchinson Island terminals of the Seaboard Air Line Railway, is practically completed, and will soon be in operation. Equipment of modern design has been installed in every department, and in the mixing department particularly the machinery is said to be of very high class. It is the intention of the company to manufacture about 20,000 tons of fertilizer this season. Officers and directors of the Southern Fertilizer & Chemical Co. are Messrs. M. M. Stewart, president; J. J. Rauers, vice-president; A. D. Strohbar, secretary-treasurer and general manager; R. C. Canon, W. G. Barnwell, J. L. Morehead.

## MECHANICAL

### New Hand Elevator.

There is a steady demand for superior hand elevators. They are needed in all kinds of factory and mill buildings, warehouses and other structures. A new hand elevator which is finding a ready sale because of its superior features is illustrated herewith.



A NEW HAND ELEVATOR.

This elevator is reliable, strong and free in movement. The machines have large rope wheels keyed to steel shafts, which revolve on steel antifriction roller bearings. The spur wheels are cast from cut patterns of extra length to insure durability, and the cable wheels are double heavy and spoke-ribbed for the same purpose. The main shafts are of turned steel of large diameter, so as to resist the torsional strain to which they are subjected, these shafts all resting on self-oiling bearings. The elevator is equipped with a self-oiling brake, released or applied from any floor. The Energy safety attachment, with which these elevators are also equipped, is sure in action and will lock the car instantly in case of breakage of the cable. The cable is made of Swedish iron capable of sustaining a load five times the rated capacity of the car, whereby the possibility of breakage is reduced to a minimum.

The Energy Elevator Co., 405 Cherry street, Philadelphia, Pa., manufactures the new hand elevator described.

### High-Speed Reinforced Concrete Construction.

Reinforced concrete construction is playing an important part in the unusual building activity now prevailing. Its merits are specifying it more and more every day, and the most critical architects and building owners are giving it preference. There has recently been completed at Detroit, Mich., a building which exemplifies high-speed reinforced concrete construction. It is owned by the Burroughs Adding Machine Co., which manufactures the Burroughs Adding and Listing Machines, so generally used throughout this country and in other parts of the world. The structure furnishes an excellent example of modern reinforced concrete skeleton construction as applied to factory buildings. It is 59 feet 4 inches by 148 feet 8 inches, and three stories high. The entire building, including wall columns, wall beams, footings and stairs, is of concrete-steel construction, reinforced in accord-

ance with the Kahn system of reinforced concrete.

The exterior was designed in order to secure maximum amount of light in the interior. The accompanying illustrations show the large amount of window area provided.

Below the windows a light eight-inch brick curtain wall rests directly on the concrete work, and is carried directly by reinforced concrete beams to the wall columns. The windows extend directly from this wall to the beam above.

The site is situated upon low land formerly a marsh. For this reason exceptionally large spread footings had to be used under the columns to secure proper bearing for them. A low bearing value, 2500 pounds per square foot, was allowed for the ground; in fact, the soil was so poor that a large portion of the ground floor, though resting directly on the soil, had to be reinforced to prevent settling.

This lower floor was designed for a safe live load of 1200 pounds per square foot, while the upper floors were designed for 200 pounds. Besides this superimposed load, these floors also carried a line of heavy shafting attached to the underside of the beams.

The floors were all designed in solid concrete, while the roof was built in the Kahn reinforced hollow tile construction. In this latter construction 6x12-inch hard-burnt tiles are laid with a four-inch space between, and into this space is laid a trussed bar with a rich mixture of concrete. In this way 4x6-inch beams are obtained 16 inches on centers, this being similar to ordinary wood-joist construction. The lightness of this design and its ease and speed of erection are distinctive advantages. Because of its lightness greater depths can be used than in ordinary concrete constructions, with a result that greater spans can be employed and heavier loadings carried without the use of intermediate beams. Spans as great as 32 feet have been built in this way without a single beam.

Construction was begun in June, during very rainy weather, and after excavation the plat had much the appearance of a

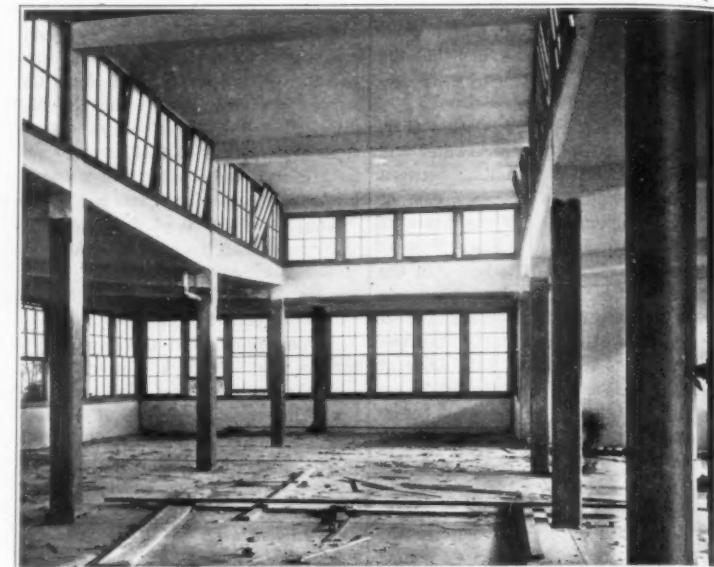
steel in connection with fireproof buildings, and, needless to say, were pleased at the speed of this reinforced concrete construction. As a matter of fact, it is claimed that the whole building was erected in a shorter space of time than would be required for the mere delivery of the structural steel during the present crowded condition of the steel market.

The architectural features of this building were exceptionally well taken care of,

### Blasting in Quarries.

By BURTON G. COPE.

When visiting quarries which make a specialty of getting out stone for sand or ballast it is very evident that many of them have not kept abreast of the times in their methods for producing the material ready for the car or crusher. Railroad contractors could give them much valuable information relative to shooting



HIGH-SPEED REINFORCED CONCRETE CONSTRUCTION—KAHN SYSTEM.

and show what a pleasing effect can be secured in a simple building of this class with a minimum expenditure of money. The accompanying views give a general idea of this, but do not do justice to the beautiful appearance of the snowy white cement work set off by the red strip of brick work under the windows.

Albert Kahn of Detroit had charge of the architectural work for this building, and the Concrete Steel & Tile Construction Co., Detroit, was the contractor for the reinforced concrete work. The Kahn system of reinforcement is controlled by

out rock which would save time and expense over present methods. The writer refers to those who use short holes and light charges of powder on high ledges. The most economical method for shooting material when it is to be used for crushing or ballast is with deep holes, using heavy charges of powder, and what is known among the contractors as the "Spring Shot System." For the benefit of those who are not familiar with this system I will go into the matter in detail. Suppose you have a ledge 40 feet high and the entire ledge is to be used for the same purpose, it being all of the same quality of stone. The holes are drilled from the surface to within two or three feet of the bottom. If the material shoots free they can be spaced about 20 feet from the face and about an equal distance apart. Now, in order to get a cavity large enough to hold sufficient powder to throw out the material and pulverize it for handling, it is necessary to spring the hole at the bottom. Usually about four sticks of dynamite is placed at the bottom of each hole and fired. This makes a cavity large enough to hold from 6 to 10 sticks; this is placed and fired, which produces a cavity large enough to put in sufficient dynamite for the third or last spring. This is based on the drill hole being in three inches in diameter, as smaller holes require a greater number of springing shots. In springing the hole the third time the amount of explosives used depends entirely on the judgment of the man in charge of the shot, as it is necessary that the cavity be large enough to hold a given amount of powder which it might require to move a given amount of rock. This can be very accurately gauged by the powderman from his first shots and by the way the rock breaks from the springing shot; also from the powder shot, as different formations require more or less powder to give the same results. There is no rule that can be laid down covering the amount of powder to be used that could be depended upon and which would meet the varying conditions, but it is simply a matter of judgment of experiments in making the first shot. When making the springing shots with the dynamite it is not neces-



HIGH-SPEED REINFORCED CONCRETE CONSTRUCTION—KAHN SYSTEM.

swimming pool. The centering for the floor in some cases sank under its own dead weight until proper provisions were made for spreading the load. In spite of these difficulties work proceeded very rapidly, and in less than two months the entire skeleton construction was complete. Later the brick curtain walls were built and the windows set in place.

During the summer of 1904 the owners of the building had had experience with delays occasioned by the use of structural

the Trussed Concrete Steel Co., main offices at Detroit, Mich.; works at Detroit and Pittsburgh.

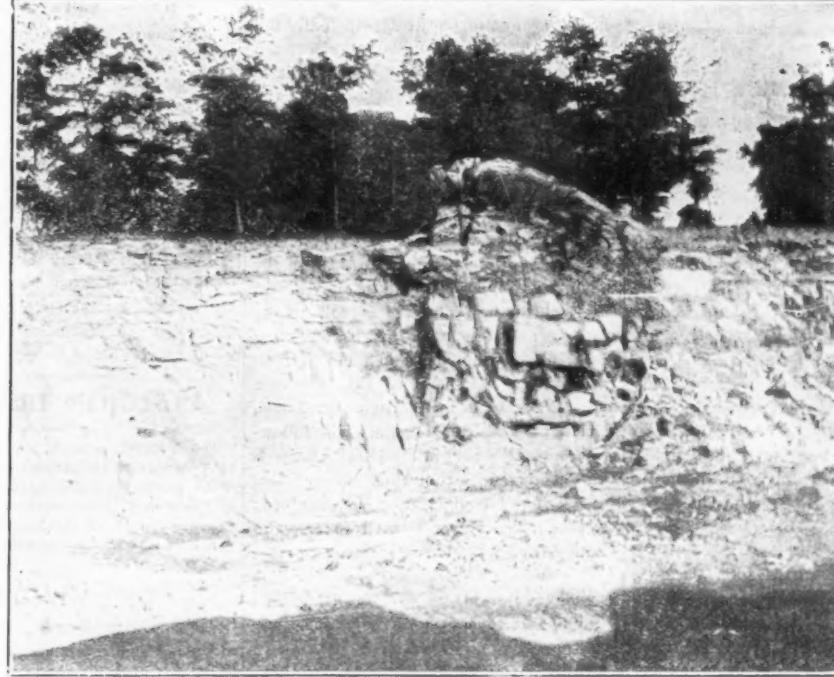
The election of officers of subdivisions in the several States of the Southern Cotton Association will be held December 2, of county or parish officers on December 9, and of State officers January 3.

Early next month the mayors of Virginia cities will organize a State municipal league.

make a sand or many of the times the material. Railroads much shooting

sary to tamp these, but some fine sand or earth might be placed on top of the dynamite, which usually blows out when the shot is fired, leaving the hole free for placing the next charge. It is every powderman's desire to get out his material at the lowest possible cost not only to demonstrate that he thoroughly understands his business, but to increase the

foot in hard sand rock, using three-inch holes. Another advantage of this drill is it can be run successfully by any ordinary mechanic or steam engineer, and the machine is so arranged to be moved from one hole to another by its own power, which effects a considerable saving in time and expense. The same company also manufactures the "Economy Blast Hole



BLASTING IN QUARRIES.

earnings in his branch, and every progressive man who will look into these matters will use his best efforts to employ the best methods and most improved devices. An accompanying illustration shows a shot in midair. This shot was made by E. B. Cornelius of Orrville, Ohio, for the Massillon Sand & Stone Co. at Barre's Mills, Ohio. The object in making this shot was to demonstrate the superiority of the "Spring Shot System" over the method then employed by them, that of using short holes and light charges; also to demonstrate the improved method of loading holes with the "Economy Blast Hole Loader" over that of loading the powder with a pole. The ledge of rock was 40 feet high and the material was over a very hard fine stone used for making sand for the manufacture of steel. The shot was made at considerable disadvantage, as the holes could not be drilled to the bottom, the drill used being tripod steam drill, and its capacity did not exceed 18 feet. However, the results were very gratifying: three holes were used and loaded with eight kegs of powder each; 1200 square yards of rock were blown out, effecting a saving of 204 feet of drill work and \$37 in powder over the quarryman's old system of shooting. Had the holes been drilled to the bottom the saving would easily have been 50 per cent. more, as with this system of shooting when the bottom is blown out the top of the ledge is thrown down at practically no cost. Railroad contractors have demonstrated to the entire satisfaction of all that the "Spring Shot System," using deep holes and large charges, is the most economical and practical method for excavating rock.

To accomplish the deep drilling the well drill has proven to be the most successful. The Cyclone Drilling Machine Co. of Orrville, Ohio, has designed and equipped one of their small prospecting outfits with a special outfit of tools for drilling three-inch holes, which size is found to be the most practical in all kinds of material. Some very remarkable drill work was accomplished with this drill, the cost in some cases running below 10 cents per

Loader," a device which should interest everyone who uses black powder; with it you are able to load the holes in the minimum of time through any and all kinds of material, regardless of how loose or ravelly it may be, without danger of clogged holes or waste of powder which goes into the crevices and sides of the hole, as is the case when loading with a pole.

A complete description of the loader and method of loading is fully explained in a neat booklet entitled "The Economy

Loader," a device which should interest everyone who uses black powder; with it you are able to load the holes in the minimum of time through any and all kinds of material, regardless of how loose or ravelly it may be, without danger of clogged holes or waste of powder which goes into the crevices and sides of the hole, as is the case when loading with a pole.

The building is of light gray pressed brick, with Bedford stone trimmings and metal roof. The plan is quadrangular in shape, with a 40x60-foot wing for lecture-room in the rear, which does not show in the illustration.

In the basement, which is well out of ground, will be the technical laboratory, assay room, photo room, dark room, constant temperature room, fireproof room,

the museum and one large and one small lecture room.

The second floor, which has corridors similar to the first floor, will be taken up with the general laboratory, quantitative laboratory, medical laboratory, research laboratory, electro chemistry, physical chemistry, spectroscope room, lecture room, preparation and balance rooms, also coat and storage rooms. All laboratories will be provided with tables, draught closets and other appurtenances, and fitted up with appliances according to the latest and most advanced ideas.

Each room will be well provided with light and ventilation, the windows extending close up to the ceiling and are pivot-hung in the center to permit of the greatest amount of air in addition to the mechanical system of ventilation which will be installed.

All materials used throughout will be the best of their respective kinds. A complete system of hot-water heating and electric lighting will be installed. The completed building will be thoroughly modern in every particular and a splendid acquisition to the group of buildings already erected at the University from plans prepared by Mr. Milburn.

#### A New Steamboat Company.

The Ohio & Tennessee River Transportation Co. of Davidson county, Tennessee, Nashville being the county-seat, has been incorporated to build and purchase steamboats for freight and passengers. The capital is \$10,000, and the incorporators are A. R. Ticknor, John C. Tomerlin, Joseph W. Byrns, Hugh Farrell and John E. Fisher.

The Commercial Club of Henderson, Ky., has effected permanent organization with Messrs. Charles E. Dallam, president; H. S. Kerby and R. P. Farnsworth, vice-presidents, and C. F. Kleiderer, W. H. Weaver, Albert Lieber, James E. Rankin, J. W. Clay, Carl P. Schlamp, James A. Yeaman, J. L. Nicholson, Frank Eckert and A. Waller, directors. The club starts with a membership of 210 individuals, firms and corporations.



A NEW SOUTHERN BUILDING.—LABORATORY FOR UNIVERSITY OF NORTH CAROLINA.

Blast Loading System." Every quarryman who adopts this method of rock excavating will not only get his material out at the least possible cost, but will be able to have loose enough material ahead that he can make his shots when the weather is most favorable.

The Chamber of Commerce of Clarksville, Tenn., is leading in a movement for the exemption from taxation for a definite time of new factories in Tennessee.

heavy chemical room, locker room, toilet room, a workshop, toilet and fuel room, gas-machine room and a large storeroom.

On the main floor, which has wide corridors running at right angles to each other the full length and depth of the building, will be the office, library, directors' laboratory, professors' laboratory, organic laboratory, combustion room, quantitative laboratory, fume room, technical analysis, advanced quantitative laboratory, preparation rooms, balance rooms,

At the annual meeting this week at Atlanta of the Southern and Southwestern Railway Club Mr. Lawford H. Fry of the Baldwin Locomotive Works will make an address on balance compound locomotives in service.

The Marion (S. C.) Board of Trade has been organized with Messrs. J. L. C. Bird, president; E. L. Gaston, vice-president, and L. J. P. Cutlar, secretary and treasurer.

## TEXTILES

[A complete record of new textile enterprises in the South will be found in the Construction Department.]

Correspondence relating to textile matters, especially to the cotton-mill interests of the South, and items of news about new mills or enlargements, special contracts for goods, market conditions, etc., are invited by the MANUFACTURERS' RECORD. We shall be glad to have such matter at all times, and also to have any general discussion relating to cotton matters.

### Union Mills Reorganization.

A summary of the plan for reorganizing the Union Cotton Mills and the Buffalo Cotton Mills of Union, S. C., is contained in a current dispatch from Union. The dispatch says:

"Notice has been received here of the incorporation in Maine of the Union Cotton Mills Co. The capital stock is \$5,500,000, of which \$500,000 is common, \$4,500,000 is first preferred and \$500,000 second preferred stock. The permanent officers are: Robert F. Herrick, Boston, president; Francis K. Carey, Baltimore, vice-president; R. Goodwyn Rhett, Charleston, S. C., treasurer. The Buffalo Cotton Mills Co. was likewise incorporated, its capital being \$3,500,000—common stock \$500,000, first preferred \$2,500,000, second preferred \$500,000. The officers are: R. Goodwyn Rhett, president; Francis K. Carey, vice-president; Robert F. Herrick, treasurer. These companies are simply what are known as 'holding corporations' for the benefit of the mills' creditors, and are in accordance with the plan recently suggested by the reorganization committee, whose members, it will be noted, are officers of the corporations."

### The Nobby Hosiery Mill.

The promoters of the new knitting mill at Lexington, N. C., which was mentioned last week, have incorporated the Nobby Hosiery Mill Co. to build the proposed plant. Their charter gives the privilege of increasing the capital stock to \$100,000, but the initial investment will be \$10,000, as was stated. A site will be secured and a brick building two stories high, 50x50 feet, will be erected to accommodate the equipment, including 42 machines for the production of hosiery. The incorporators are Messrs. C. M. Thompson, Grimes Bros. and George W. Montcastle of Lexington, Edw. L. Greene of Yadkin College, N. C.; Mr. Alexander of Kernersville, N. C., and F. W. Patterson of High Point, N. C. The last named will be elected secretary and treasurer. He is now in New York to award contracts for the mill's machinery.

### National Hosiery Manufacturers.

The program for the semiannual meeting at Philadelphia this week of the National Association of Hosiery Manufacturers included an address of welcome by Mayor Weaver, address by President Harold Lamb of Union Point, Ga.; report of Secretary-Treasurer C. B. Carter of Knoxville, Tenn., and papers by W. P. McClure of Philadelphia, W. F. Duffy of Franklin Falls, N. H., and J. H. McPhail of Nashville, Tenn., on the ethical relations of producers, manufacturers and distributors; by Charles Chipman of Easton, Pa., on the benefits to be derived from the association; by Howell E. Beam of Philadelphia and D. J. Carpenter of Newton, N. C., on selling, and by Perry Starkweather of Minneapolis, on the improvement of the hosiery industry.

### The Walterboro Cotton Mills.

In the MANUFACTURERS' RECORD of September 28 reference was made to the incorporation of the Walterboro Cotton Mills of Walterboro, S. C., and the fact that the new company had taken over the

property formerly known as the Colleton Cotton Mills. The new company has since organized with the following officers: President, John F. Lucas; vice-president, Walter Pringle; secretary-treasurer, Julian Mitchell, Jr.; directors, Paul Sanders, P. R. Rivers, Julian Mitchell, Jr., Walter Pringle and John F. Lucas. The mill has an equipment of 6250 spindles and 272 looms for manufacturing cotton cloth, and James T. McGregor of Fort Mill, S. C., has been engaged as superintendent.

### The Jackson Mills.

Further information regarding the Jackson Mills of Iva, S. C., which was reported last week, is of interest. As was indicated, the company has changed its capitalization to \$325,000, and decided that the equipment of textile machinery will consist of 21,000 spindles and 650 looms, with accompanying complement. The buildings for the plant are now under construction. D. P. McBrayer, president and treasurer of the Toxaway Mills, Anderson, S. C., is president of the Jackson Mills. Messrs. C. R. Makepeace & Co. of Providence, R. I., are the architects in charge, and J. L. Masters is the builder. Three and four-yard goods for domestic and foreign trade will be the product.

### The South Atlantic Waste Co.

The incorporators of the South Atlantic Waste Co., lately reported, have elected D. H. Henderson, president; George Stephens, vice-president; J. W. Todd, treasurer, and L. A. Lockwood, general manager. This company will erect three one-story buildings 40x100, 50x100 and 50x100 feet, and a two-story building 60x100 feet to be equipped for handling cotton waste. It is capitalized at \$50,000, as stated recently, and is located at Charlotte, N. C. R. C. Bibberstein is the engineer in charge.

### A 5000-Spindle Mill.

Plans which have been formulated at Watkinsville, Ga., for building a cotton mill have proven successful, and a company will soon be organized. Messrs. A. W. Ashford, E. J. Crowley, A. C. Jackson, D. A. Osburn and H. A. Thomas will be the directors. E. B. Thompson will be president, and A. J. Baxter of High Shoals, Ga., will be secretary-treasurer. The company will build a mill of 5000 spindles for manufacturing yarns, and hopes to begin construction work by January 1. It will have a capital stock of \$100,000.

### Textile Notes.

Mr. J. W. Watts of Stony Point, N. C., and associates have purchased and will operate the Moore Cotton Mills near Taylorsville, N. C. They may make some improvements later on.

Messrs. Charles Iceman, W. S. Lee, R. A. Morrow, W. C. Heath and associates have incorporated the Iceman Lee Cotton Mills Co. of Monroe, N. C., with a capital stock of \$150,000, for manufacturing cotton goods.

Dispatches from Huntsville, Ala., state that the Madison Manufacturing Co.'s property in that city has been sold to the Farmers' Loan & Trust Co. of New York under a decree of court. This is a mill of 15,000 spindles.

The Portsmouth Cotton Mills will be organized with capital stock of \$40,000 to lease and operate the knitting mill of the Portsmouth Cotton Manufacturing Co., which plant is now operated under a lease which expires January 1. Messrs. John L. Watson, S. P. Oast, Jos. A. Parker and Wm. G. Parker have been appointed a committee to effect the new organization. This proposition was recently referred to.

## LUMBER

[A complete record of new mills and building operations in the South will be found in the Construction Department.]

### For White Labor.

At a conference held at Hattiesburg, Miss., on November 8 representatives of leading lumber mills of that section perfected plans for bringing 2000 white laborers from different sections, principally the North, to work at the mills and afterward to engage in agriculture. Recently, it is stated, about 400 saw-mill laborers, for the most part Scandinavians, have been brought into the district and are rendering satisfactory service to the operators. There is now a demand for more labor of the same kind, which demand is responsible for the present movement. It is the purpose of the operators to utilize the labor for the development of the timber, after which the lands will be sold to the employees at reasonable prices, enabling them to settle and develop them agriculturally. It is understood that the men will be obtained in Chicago, St. Louis, Cincinnati and Philadelphia. The following companies are interested: Camp & Hinton of Lumberton, Pine Lumber Co., Mish; Ship Island Lumber Co., Sanford; A. G. Little Lumber Co., Clyde; Eureka Lumber Co., Eastabachie; Mason Lumber Co., Candsi; J. E. North Lumber Co., Bond; Empire Lumber Co., Jackson; Finkbine Lumber Co., Wiggins; the Eastern Lumber Co., Fernwood.

### Timber Properties Purchased.

Announcements state that the properties of the Gauley Company of Camden-on-Gauley, W. Va., owned by the Baltimore & Ohio Railroad Co., have been purchased by the Cherry River Boom & Lumber Co. of Richwood, W. Va. Improvements will be made and development of the timber will be carried on in connection with the development of timber on about 250,000 acres of lands in Nicholas, Webster, Pocahontas and Greenbrier counties, which the purchasing company already owns.

The Tioga Lumber Co. has completed the construction of a double-band saw-mill about five miles northwest of Camden-on-Gauley, Nicholas county, and begun operations with a force of 200 men. Machinery of modern design has been installed, and a number of dwelling-houses for the accommodation of its employees have been erected by the company.

### At Pensacola.

Timber and lumber exports from the port of Pensacola, Fla., during October amounted to more than 24,000,000 superficial feet, the leading item of which was yellow pine. The greater portion of shipments went to South American ports, but much lumber was consigned to various European and Asian ports, the last cargo that cleared going to Odessa, Russia. During the month 6000 barrels of rosin were shipped, the aggregate of shipments being limited by quarantine regulations.

### A Crate Factory Needed.

In writing the MANUFACTURERS' RECORD regarding a crate factory proposed for establishment at Laredo, Texas, Mr. W. R. Pace of that city says the enterprise is needed in that section to furnish crates for the onion growers. Mr. Pace believes that there is a good opportunity for some progressive manufacturer to locate a crate factory in Laredo, and he is prepared to co-operate with anyone interested.

### Lumber at Liverpool.

The monthly timber circular of Duncan, Ewing & Co. of Liverpool shows that

during October 4000 cubic feet of hewn American pine was imported at Liverpool, 40,000 cubic feet of sawn pine at Liverpool, 33,000 feet of planks of lumber at Liverpool and 16,000 feet at Manchester.

### Lumber Notes.

During October the Sabine Tram Co. of Beaumont, Texas, shipped 425,000 staves from its mill at Dewey.

The Beaumont Saw-Mill Co. of Beaumont, Texas, put up 600,000 shingles during October and shipped 957,000 feet of lumber.

It is said that Nicholas county, West Virginia, has nine band-saw mills in addition to a number of portable mills, capacities varying from 8000 to 120,000 feet of lumber per day.

The Sabine Tram Co. of Beaumont, Texas, shipped from its mill at Deweyville, Texas, during October 2,929,530 feet of lumber, and from its mill at Juanita, Texas, \$93,088 feet.

## FOREIGN LETTERS

The MANUFACTURERS' RECORD is so widely read in foreign countries that we are in constant receipt of many letters from all parts of the world. Some of these letters indicate the disposition of foreigners to buy American goods, and are therefore of interest to our readers.

### Trade With Bremen.

Louis Boese, No. 40 Richard Wagnerstrasse, Bremen, Germany:

"The following products are being imported from your country in large quantities, viz.: Cottonseed, cottonseed oil, cotton oilcake, lubricating oil, margarine, dried apples, pears, apricots, prunes, malt for beer, bran, bolts, linseed, grassseed and cloverseed. For good American houses dealing in these articles I should like to act as agent or representative in this city strictly on a commission basis. Bremen is a good market also for pitch pine, walnut and other kinds of lumber. If American houses would be willing to send me a small sample lot of the different kinds of lumber which they handle, so that I might show the samples to parties interested in the lumber business and take up orders, I think that I shall be able to do a good business."

### Business in Nicaragua.

Victor M. Mora, Bluefields, Nicaragua:

"I intend to establish a commission house here and in Managua, the capital of the country, in order to introduce American goods and to exploit our own products, such as coffee, rubber, hides, etc. In dealing with manufacturers prices, discounts, terms of sale and commissions ought always to be determined beforehand. We have also large tracts suitable for the cultivation of bananas, rubber plants and cereals of all kinds, as well as fir cattle, all sources of wealth which are now beginning to be developed to the great benefit of the foreign capital invested. We should like to get as soon as possible price-lists of articles for the equipment of a soap factory at this place in which we are interested."

John Clinton and associates expect to organize about January 1 the hosiery-mill company lately reported as proposed. They have secured subscriptions to more than half of the capital stock of \$20,000. This mill is to be located at Brownsville, Tenn.

The Raccoon Company has been formed to continue the Raccoon Mills, the plant recently referred to as resuming operations after an idleness of some months. There are 3424 spindles and 112 looms in this mill. It is located at Raccoon, Ga.

# Construction Department

## TO OUR READERS!

In order to understand and follow up properly the Construction Department items, please bear in mind the following statements:

### EXPLANATORY.

The MANUFACTURERS' RECORD seeks to verify every item reported in its Construction Department by a full investigation and complete correspondence with everyone interested. But it is often impossible to do this before the item must be printed, or else lose its value as news. In such cases the statements are always made as "rumored" or "reported," and not as positive items of news. If our readers will note these points they will see the necessity of the discrimination, and they will avoid accepting as a certainty matters that we explicitly state are "reports" or "rumors" only. We are always glad to have our attention called to any errors that may occur.

\* Means machinery, proposals or supplies are wanted, particulars of which will be found under head of "Machinery, Proposals and Supplies Wanted."

In correspondence relating to matters reported in this paper, it will be of advantage to all concerned if it is stated that the information was gained from the MANUFACTURERS' RECORD.

### ADDRESS FULLY.

To insure prompt delivery of communications about items reported in these columns, the name of one or more incorporators of a newly incorporated enterprise should be shown on the letter addressed to that town, or to the town of the individual sought, as may be shown in the item, as sometimes a communication merely addressed in the corporate or official name of a newly established company or enterprise cannot be delivered by the postmaster. This will help to insure prompt delivery of your communication, although it is inevitable that some failures on the part of the postal authorities to deliver mail to new concerns will occur.

### WRITE DIRECTLY.

It is suggested to advertisers and readers that in communicating with individuals and firms reported in these columns, a letter written specifically about the matter reported is likely to receive quicker and surer attention than a mere circular.

## BALTIMORE BUILDING NOTES.

### Business Buildings.

Baltimore—Warehouse.—John J. & Charles W. Hurst, Calvert Building, Fayette and St. Paul streets, have awarded contract to Frederick Wright Company, 1305 North Central Avenue, for the construction of warehouse at 21 Centre Market Space; three stories, 25x80 feet; brick with stone trimmings; steel beams; galvanized-iron cornice; sanitary plumbing; cost about \$5000.

Baltimore—Dwellings.—Henry E. Cook, 53 East Monument street, will erect 23 three-story dwellings on St. Paul street near 29th street to cost about \$100,000.

Baltimore—Warehouse.—The Baltimore Fidelity Warehouse Co., Fidelity Building, Charles and Lexington streets, has engaged the Woodruff-McLaughlin Company, constructing engineers and architects, 100 East Lexington street, to prepare plans and specifications for and erect storage warehouse at Lazaretto Point, Canton (suburb of Baltimore); three or five stories high, 141x159 feet; concrete-block exterior; mill construction; slag roof; fire doors.

Baltimore—Carbarn.—The United Railways & Electric Co., Continental Building, Baltimore and Calvert streets, has awarded contract to John Waters, builder, 23 East Center street, for the construction of an addition to its carbarn on Light street, near Fort avenue. The addition will be 100x150 feet.

Baltimore—Office Building.—James M. Amherst, 207 North Calvert street, has awarded contract to John Cowan, builder, 106 West Madison street, for the reconstruction of office building at 16 East Lexington street. Electric wiring and fixtures, sanitary plumbing and heating system will be installed; cost about \$5000; Tormey & Leach, architects, 223 North Charles street.

Baltimore—Bank.—The Metropolitan Savings Bank, C. C. Shriver, president, Lexington and Calvert streets, has commissioned Parker & Thomas, architects, Union Trust Building, Charles and Lexington streets, to prepare plans and specifications for bank

building to be erected at southwest corner of Charles and Saratoga streets; one story, 110 feet frontage; granite or marble exterior.

Baltimore—Dwellings.—Frank H. Phelps, Fidelity Building, Charles and Lexington streets, has awarded contract to David C. Stonaker, 30 Pearl street, for the construction of two two-and-one-half-story dwellings in Walbrook (a suburb of Baltimore) to cost about \$9000.

Baltimore—Undertaking Establishment.—Evans & Spence, 1000 East Baltimore street, has awarded contract to J. J. O'Connor, 7 Lloyd street, for the construction of funeral apartments building on Mt. Royal avenue, near Maryland avenue; two stories; brick with terra-cotta and stone trimmings; electric wiring and fixtures; sanitary plumbing; heating system. This building previously mentioned.

Baltimore—Store Building.—The Central Realty Co. has been incorporated with an authorized capital stock of \$50,000 by Andrew and Charles L. Hilgartner, 712 West Baltimore street; Sylvanus Stokes, proprietor Hotel Caswell, Baltimore and Hanover streets; J. Q. H. Smith, Jr., Gaither Building, 111 North Charles street, and Addison E. Mulliken. This company has acquired the lot at 22 West Baltimore street and has commissioned Joseph Evans Sperry, architect, Calvert Building, Fayette and St. Paul streets, to prepare plans and specifications for a store building to be erected on the site; one or two stories, 22x150 feet; brick with stone trimmings; steel-frame fireproof construction; electric wiring and fixtures; sanitary plumbing.

Baltimore—Store Buildings.—John L. Reed, 9 East Mt. Royal avenue, has awarded contract to John E. Marshall & Son, Vickers' Building, German near South street, for the construction of two store buildings at 11 and 13 South Gay street; two stories; brick with granite base and terra-cotta trimmings; copper cornice; electric wiring and fixtures; sanitary plumbing; heating system.

Baltimore—Church.—The Mt. Royal Methodist Protestant Church, F. H. Lewis, pastor, 1503 Mt. Royal avenue, has awarded contract to Charles W. Simpson, 415 East Lexington street, for the construction of church building on Mt. Royal avenue, near Mechelen street; one story, 29.6x72 feet; brick and stone; cost about \$5000; J. E. Laferty, architect, 11 East Lexington street.

Baltimore—Warehouse.—Referring to warehouse to be erected at 22 Center Market Space for Louis Lipsitz, 714 West Lombard street, Willis & Mason, 22 East Lexington street; Frederick Wright Company, 1305 North Central avenue; Henry L. Maas, 906 Aisquith street, and Wm. H. Wells, 211 North Liberty street, are estimating on the construction; three stories, 25x80 feet; brick with stone trimmings; slag roof; elevator; Henry J. Tinley, architect, Hoffman Building, 11 East Lexington street; bids to be in November 18.

Baltimore—Warehouse.—E. B. Hunting and John Hubner, both at 213 Courtland street, have awarded contract to J. H. Walsh & Bro., 321 Clay street, for the construction of warehouse on Appleton street and P., B. & W. Railroad; two stories, 50x52 feet; brick with stone trimmings; slag roof; Edward L. Walsh, architect, 321 Clay street.

Baltimore—Apartment-house.—W. L. Minor, architect, 18 East Franklin street, is making revised plans for apartment-house for S. C. Hollander, 202 West Baltimore street, to be erected at Linden avenue and Whitelock street.

Baltimore—Store Building.—Isidor Teweles, 227 North Eutaw street, will reconstruct store buildings at 213, 215 and 217 North Eutaw street; new front of brick with marble trimmings; steel beams; cast-iron columns; galvanized-iron cornices and skylights; fire shutters. Heating, gaspiping, electrical work and plumbing not in contract. Henry S. Rippl, 7 Clay street, is estimating on the work; J. E. Laferty, architect, 11 East Pleasant street.

Baltimore—Dwellings.—Henry E. Cook, 53 East Monument street, has commissioned Jacob F. Gerwig, architect, Hoffman Building, 11 East Lexington street, to prepare plans and specifications for 56 dwellings to be erected on North Calvert street between 26th and 27th streets; three stories, 16x150 feet; brick with stone trimmings; tin roofs; electric wiring and fixtures; sanitary plumbing; heating systems; cost about \$150,000.

Baltimore—Dwellings.—George W. Singer, 1212 North Fremont avenue, will erect six

two-story dwellings at corner Kate and Park Heights avenues; Jacob F. Gerwig, architect, Hoffman Building, 11 East Lexington street.

### Manufacturing Buildings and Other Enterprises.

Baltimore—Shirt Factory.—Referring to shirt factory to be erected at Pratt and McHenry streets by Oppenheim, Oberndorf & Co., 112-124 West Fayette street, John Cowan, 106 West Madison street; John Hiltz & Son, 3 Clay street; E. D. Preston, 140 West Fayette street; Morrow Bros., 212 Clay street; Hopkins-Barnett Company, Calvert Building, Fayette and St. Paul streets; Wm. Steele & Sons, 17 West Saratoga street, and the Noel Construction Co., Eutaw and McCulloch streets, are estimating on the construction; four stories, 70x155 feet; brick with galvanized-iron cornice; mill construction; slag roof; metal frames and sashes. Two elevators and fire-escapes will be installed in fireproof shafts 19x20 feet, constructed of brick and reinforced concrete. Electrical work, plumbing, heating and elevators not in contract. A power plant will also be installed. Bids to be in November 20; Charles E. Cassell & Son, architects, 411 North Charles street.

Baltimore—Flint and Feldspar Grinding Plant.—The Eastern Flint & Feldspar Co., controlled by the American Pottery Supply Co., James C. Gittings, president, 616 North Calvert street, has established a flint and feldspar grinding plant near Claremont, a suburb of Baltimore. The plant, which will have a capacity of 40 tons in 24 hours, will grind about 5000 tons of French flint and 5000 tons of Norwegian feldspar. The product will be sold to manufacturers of a special grade of paint. The plant is equipped with the latest-improved machinery for the manufacture of its product.

Baltimore—Roofing Materials.—The Maryland Roofing & Manufacturing Co. has been incorporated with an authorized capital stock of \$20,000 to manufacture and sell roofing materials by Howard L. Franck of the Maryland Tar Roofing Co., 130 South Charles street; Richard T. Franck, Joseph W. Chapman, Jr., Calvert Building, Fayette and St. Paul streets, all of Baltimore, Md., and Curtis B. E. Holton and Harold K. Paxton, both of Philadelphia, Pa.

Baltimore—Stone-cleaning and Sand-blast Company.—The Baltimore Stone Cleaning & Sand Blast Co. has been incorporated with an authorized capital stock of \$5000, to clean stone by sand-blast process, by David F. Saum, John R. Kensett, 2429 Madison avenue; James P. Brady, 1113 Cathedral street; John W. McCleary and Lucien C. Odendhal.

Baltimore—Shirt Factory.—H. W. Rogers & Co., Builders' Exchange Building, 2 East Lexington street, as agents, have commissioned Henry J. Tinley, architect, Hoffman Building, 11 East Lexington street, to prepare plans and specifications for a factory building to be erected at 108 West Fayette street; six stories, 29x100 feet; brick with stone trimmings; steel beams; slag roof; electric wiring and fixtures; sanitary plumbing; heating system; elevator. Oppenheim, Oberndorf & Co., shirt manufacturers, 112-124 West Fayette street, will occupy the building, which will be connected by bridges to the main factory.

Baltimore—Novelty Factory.—Frederick Bergner & Co., manufacturers of fancy boxes, albums and novelties, 308 and 310 West Pratt street, have awarded contract to Morrow Bros., 212 Clay street, for the construction of foundations for the new factory building they are going to erect at Paca and Cross streets. The plans for the building will shortly be distributed to builders for estimates on construction; Joseph Evans Sperry, architect, Calvert Building, Fayette and St. Paul streets. This building previously mentioned.

Baltimore—Steel-Car and Foundry Plant.—The South Baltimore Steel Car & Foundry Co., Howard Carlton, president, Continental Building, Baltimore and Calvert streets, which has an authorized capital stock of \$1,000,000, of which \$750,000 has been issued, is considering the proposition to issue an additional \$750,000, bringing its capital stock to \$1,500,000. The increase will be used to enlarge its plant at Curtis Bay.

Baltimore—Brewery.—The Monumental Brewing Co., National Marine Bank Building, Gay and Water streets, has awarded contract to J. H. Miller, 110 Dover street, for construction of an addition to its plant at 7th and Lombard streets; three stories, 32x72 feet; brick with stone trimmings; steel

beams; slag roof; Otto C. Wolf, architect, 1025 Arch street, Philadelphia, Pa.

Baltimore—Real Estate.—The Forest Park Land Corporation has been incorporated with an authorized capital stock of \$10,000 to deal in real estate by Frank H. Callaway, Forest Park, Md.; John W. Styne, Edgar W. Hartlove, 107 South Gilmor street; James E. Ingram, Jr., Maryland Telephone Building, and Robert P. Graham, Maryland Telephone Building.

Baltimore—Pumproom.—The Baltimore & Ohio Railroad Co. has awarded contract to J. J. Walsh & Son, 1525 Maryland avenue, for the construction of pumproom in Camden Warehouses at Eutaw and Camden streets; room to be 19.8x22.5 feet; reinforced-concrete and steel construction; fireproof doors. J. E. Greiner, assistant chief engineer, Mt. Royal Station, prepared the plans.

Baltimore—Metal-tiling Plant.—The American Lekton Co., recently reported as having been incorporated with an authorized capital stock of \$250,000, has organized with election of the following officers: Andrew Porter, president, 609 13th street, Washington, D. C.; Benj. J. MacDonald, vice-president; Henry F. New, secretary-treasurer, Equitable Building, Baltimore, Md., and Alfred DuMontier, engineer in charge, 609 13th street, Washington, D. C. A plant three stories high, 44x122 feet, has been established at Alexandria, Va., and the product will be metal tiling, imitating clay wall tiling.

Baltimore—Circulargraph.—The Circulargraph Company has been incorporated with an authorized capital stock of \$250,000 by Wm. Montgomery, 29 East Lexington street, and Will T. Richards, both of Baltimore, Md., and Harry W. Davis.

Baltimore—Furniture Factory.—The Canton Company, 15 South street, has awarded contract to Albinus Schiuck, 3302 East Baltimore street, for the construction of furniture factory at Lakewood avenue and Dillon street; four stories, 50x150 feet; brick with granite and bluestone trimmings; concrete foundation on piling; slag roof; fire-escape; fire doors and shutters. Plumbing, heating, electric wiring and fixtures and freight elevator not included in contract; Mott & White, architects, 328 North Charles street. Headington-Pfleil Furniture Manufacturing Co., temporary address 922 Equitable Building, Calvert and Fayette streets, will occupy the building. This building previously mentioned.

### Subbids Wanted.

Mention of contractors wanting subbids on construction work and material will be found, when published, in the "Machinery Wanted" column on another page under the heading of "Building Equipment and Supplies."

Piedmont Mining & Milling Co. has been incorporated with \$100,000 capital stock, by A. A. DeLong, Oliver Woods and W. J. Parker, all of New York, N. Y., to quarry and manufacture building stone and granite.

### ALABAMA.

Birmingham—Real Estate.—Corner Lot Land Co. has been incorporated with \$9000 capital stock. Joseph Martin is president; G. B. McCormack, vice-president, and Erskine Ramsey, secretary-treasurer.

Birmingham—Steel Plant.—It is rumored that the Republic Iron & Steel Co. is having plans prepared by the Rust Engineering Co. for the erection of proposed steel plant. It is estimated that about \$1,000,000 will be expended; general offices, First National Bank Building, Chicago, Ill.

Birmingham—Steel Plant.—There have been reports current lately that the Sloss-Sheffield Steel & Iron Co. will soon begin the construction of its proposed steel plant. The facts are that while the company's directors have discussed from time to time recently the building of the plant, the project has not advanced far enough to justify any public announcements.

Brighton—Water-works.—Adler & Co., it is reported, have been awarded contract for the construction of water-works, previously mentioned.

Ensley—Furnace.—It is reported that the Tennessee Coal, Iron & Railroad Co. has begun the construction of proposed furnace in the steel-plant department to be known as No. 11, and will be built next to and connected with No. 10. An extension 110 feet long is being built to the main building to accommodate the furnace, and will be equipped with a 30-ton capacity steel crane girder;

about \$25,000 will be invested; general office, Birmingham, Ala.; New York office, 100 Broadway.

Flatwood—Lumber Company.—Bernard Hiram, Paul W. McKay and Charles Wilcox have incorporated the Hiram McKay Lumber Co. with \$50,000 capital stock.

Florence—Stove Foundry.—It is reported that the Theole-Phillips Stove Manufacturing Co. will make improvements to plant, doubling the present capacity of 60 stoves daily.

Luverne—Supply Company.—Farmers' Supply Co. has been incorporated by J. A. Black, A. H. Revel, E. F. Morgan, J. W. Turner and others.

Maplewood—Woodworking Plant.—R. H. Martin contemplates establishing plant to cut wagon and buggy bent rims, golfsticks and other small stuff out of hardwoods.\*

Mobile—Paving Improvements.—Board of Public Works, C. Lawrence Lavretta, president, is arranging for resurfacing 3500 square yards of asphalt pavement, and bids for the work will be received until November 23.\*

Mobile—Furniture Company.—William Moneagle Furniture Co. has been incorporated with \$10,000 capital stock by William Moneagle, D. W. Partridge and J. B. Burfoot.

Montgomery—Land Improvement.—The State Land Co. has been incorporated with \$10,000 capital stock by Charles B. Teasley, W. A. Gunter and Gaston Gunter.

Rescueville—Planing and Shingle Mill.—Reports state that Brown & Rogers Bros. contemplate erecting planing and shingle mill, to run in connection with grist mill and cotton gin.

Sheffield—Furniture Factory, Planing Mill, etc.—The Haley Furniture & Manufacturing Co. has been incorporated with an authorized capital stock of \$50,000 to manufacture furniture, operate planing mill, etc. C. L. Haley of Florence, Ala., is president and manager; Walter W. Stansel of Sheffield, vice-president, and James J. Challen of Sheffield, secretary-treasurer.

Talladega—Statuary, etc.—G. M. Moretti, J. E. Stone and H. L. McElderry have incorporated the Moretti Statuary & Monument Co. with \$10,000 capital stock.

Tuskegee—Artesian Well.—It is proposed to install an artesian-well system at the Industrial School, Booker T. Washington, president; borings to be 2000 feet.

#### ARKANSAS.

Brinkley—Milk-condensing Plant.—H. G. Duttlinger and associates of Memphis, Tenn., have organized the Southern Creamery Co. for the establishment of plant to manufacture condensed milk and other kindred products. About \$25,000 will be invested. The main office and distributing plant will be located at Memphis, Tenn.

Eureka Springs—Water Company.—Chartered: The Eureka Springs Water Co., with \$50,000 capital stock, by M. T. Gear, John J. Jones and F. M. Clafin.

Fort Smith—Iron Works.—It is reported that the Iowa Iron Works will establish plant for the manufacture of ore cars, mining machinery and mining tools. A foundry will also be established for making castings for any purpose. The company can be addressed in care of the Commercial Club.

Gill—Cotton Gin, etc.—The Lee County Land, Gin & Improvement Co. has incorporated with an authorized capital stock of \$25,000 to operate cotton gin, etc. H. W. Walton is president; H. C. Clayton, vice-president; J. H. Thomas, secretary, and John F. Smith, treasurer.

Hope—Hardwood Mill and Chair Factory.—It is reported that the J. W. Willis Lumber Co., J. W. Willis, president, Washington, Ohio, has begun the erection of hardwood mill and chair factory on site recently purchased. About \$200,000 will be expended.

Hot Springs—Brick Works.—Brown & Looney, operating brick works, have organized the Hot Springs Brick Co. with \$25,000 capital stock to operate plant. Additional machinery is being installed, which will increase the daily capacity to 60,000 bricks.

Little Rock—Steel Vlads.—It is reported that the St. Louis, Iron Mountain & Southern Railroad is completing arrangements for the construction of proposed vladucts; the West 3d street vladuct to be of steel construction supported on two concrete piers 45 feet high and cost \$25,000; the 12th street vladuct will be 72 feet long and cost \$11,500, the piers to be of concrete and the bridge of steel. At 13th street the company will build a steel bridge; A. I. Baker, Baring Cross, Ark., supervisor of bridges and buildings.

Little Rock—Slate Quarries.—The Arkansas Slate & Supply Co. has incorporated, with an authorized capital stock of \$300,000, for the development of slate properties. A. L.

Shultz of St. Louis, Mo., is president; E. L. McHaney of Little Rock, vice-president; S. M. Leslie of Hot Springs, Ark., secretary, and G. W. Hendrick of Little Rock, treasurer.

Little Rock—Cotton Gin.—C. P. Hannay, A. S. Deshon, O. W. Phillips and W. H. V. Heath have incorporated the Southern Ginning Co., with \$50,000 capital stock, to operate cotton gin.

Marionna—Mercantile.—The Lee County Mercantile, Real Estate & Improvement Co. has been incorporated with an authorized capital stock of \$25,000. A. R. Person is president; N. J. Jamison, vice-president; E. B. N. Walton, secretary, and William Brown, treasurer.

Perla—Crate Factory, etc.—The Perla Packing Co. has incorporated with \$10,000 capital stock to manufacture crates, etc. Albert Strauss is president; J. D. Hoogstratt, vice-president; E. R. Upmeyer, secretary, and R. W. Griswold, treasurer.

#### DISTRICT OF COLUMBIA.

Washington—Machine Shop.—W. J. Murray has purchased site on which to erect building which will be equipped as machine shop.

Washington—Publishing.—The Review Publishing Co. reported last week under Alexandria, Va., as incorporated with \$50,000 capital stock, will publish a weekly newspaper; Thomas C. Easterling, president; Joseph W. McCann, secretary-treasurer; office, Rooms 201-202 Bond Building.

#### FLORIDA.

Estifianula—Lumber Plant, Turpentine Distillery, Brick Works, etc.—The Estifianula Naval Stores & Manufacturing Co. reported incorporated last week with \$100,000 capital stock, is a consolidation of the Estifianula Manufacturing Co. of Estifianula and the John A. Davis naval stores business, Woods, Fla. The company will operate sawmill with a daily capacity of 20,000 feet, shingle mill with a daily output of 75,000 shingles, two turpentine stills, brick plant, etc. About \$25,000 will be invested in buildings and equipment. John A. Davis is president and treasurer, and L. M. Clements, vice-president.\*

Grovepark—Naval Stores.—S. F. Watts of Grovepark and W. E. Phifer of Gainesville, Fla., have organized as Phifer & Watts to manufacture naval stores. The company owns several thousand acres of round timber near Grovepark, but operations will be with only 15 crops or 150,000 boxes.

Jacksonville—Machine Shops.—The Board of Bond Trustees is considering the erection of two-story brick building, 80x80 feet, on the water-works grounds, to be equipped as machine shop for water-works and electric-light plant.

Jacksonville—Real Estate.—Chartered: The Christie Investment Co., with \$50,000 capital stock. Flavious T. Christie is president; Geo. T. Christie, vice-president, and Hugh B. Christie, secretary-treasurer.

Key West—Electric-light Plant.—The Consumers' Ice & Cold Storage Co., F. H. Ladd, president, operating ice and cold-storage plant, will install electric-light plant, and have applied for franchise. Mr. Ladd and associates were previously mentioned in these columns as having applied for franchise to operate electric-light plant.

Starke—Ice Factory.—The Starke Ice Co., previously reported incorporated with \$20,000 capital stock to operate ice factory, has purchased site on which to erect plant, equipping for a daily capacity of 10 tons.

Starke—Steam Laundry.—It is reported that Robert A. Weeks and Clyde Alvarez will establish a steam laundry.

Tampa—Sugar-cane Cultivation.—The Ohio Plantation Co. has been incorporated with \$50,000 capital stock to cultivate sugar-cane. Charles D. Ettlinger is president; Myron E. Gillett, vice-president and general manager, and D. C. Gillett, secretary-treasurer.

#### GEORGIA.

Adairsville—Water-works.—It is reported that the city has closed contract with Joseph E. McCrary, Senoia, Ga., for a map with full specifications for water-works system, previously mentioned.

Atlanta—Electric-light and Power Plant.—It is reported that the Southern Light & Power Co. has arranged the issuance of bonds to the amount of \$500,000, of which there will be issued \$300,000 immediately, for the purpose of providing the necessary funds for the company's proposed operations. This company was organized recently as a distributing company for Atlanta and vicinity, and it will operate in connection with the North Georgia Electric Co. (previously reported in these columns), and which contemplates hav-

ing from 75,000 to 100,000 horse-power for sale to manufacturing plants and other industries. The last-named company is now building steel towers 8 feet in diameter at the base, graduating to 6 feet at the top, 45 feet high, for conveying the power to Atlanta from Gainesville, 54 miles distant, where its water-power development and electric plant are located. T. L. Kelly is president of the Southern Light & Power Co.; A. J. Warner is president of the North Georgia Electric Co.

Atlanta—Brewery and Ice-plant Improvements.—The Atlanta Brewing & Ice Co. is making improvements to plant, including the installation of a 200-ton ice machine. Contract has been let.

Austell—Swing and Ladder Factory.—The Austell Swing & Ladder Co. contemplates the erection of two factory buildings; one to be two stories, 100x80 feet, and the other 100x40 feet; equipped with the latest improvements both with regard to constructive material and interior mechanical arrangements.

Buena Vista—Electric-light Plant and Water-works.—Town will vote December 11 on the issuance of bonds for the construction of electric-light plant and water-works. Address Town Clerk.

Etna—Iron-ore Mines.—Pittsburgh (Pa.) and New England capitalists have purchased 10,000 acres of hematite ore land (formerly owned and operated by the Etna Manufacturing Co. and others), which will be extensively developed, establishing furnaces and other plants later. William Bell Lowe, 12 Broadway, New York, N. Y., can give information.

Grovana—Fertilizer Factory.—The Grovana Fertilizer & Oil Co., which has just completed and begun operations at its cottonseed-oil mill, will arrange for the erection of fertilizer factory. L. A. Shepard is secretary-treasurer and manager.

Lagrange—Fertilizer Factory.—The Troup Comapny previously mentioned in these columns as to erect and operate fertilizer factory, cottonseed-oil mill and acid chambers on site purchased, will begin at once the erection of fertilizer factory which will be equipped for an annual output of 20,000 tons of fertilizers.

Madison—Fertilizer Factory.—W. W. Baldwin, J. E. Godfrey, G. W. Holmes, E. H. George, P. W. Walton, H. H. Fitzpatrick and associates have organized the Madison Fertilizer Co. to operate fertilizer factory.

Marietta—Concrete-block Factory.—W. M. Kemp, E. W. Kemp, W. J. Sheridan and Stuart Y. McMullen have incorporated the Marietta Hollow Block, Tile & Building Co., with \$10,000 capital stock, to manufacture hollow blocks for building purposes, tiling, etc.

Rockmart—Electric-light Plant.—City has voted the \$6000 bond issue previously reported for the construction of electric-light plant; M. P. Lane, mayor.

Rome—Publishing.—Sam E. Whitmire is arranging for the publication of a Sunday newspaper to be known as "The Battle Axe."

Rome—Grocery Store and Candy Factory.—McWilliams-Chidsey Company has been incorporated with \$25,000 capital stock to conduct grocery store and manufacture candy on a small scale. M. B. McWilliams is president, and W. B. Chidsey, secretary-treasurer.

Tifton—Water-works and Sewerage System.—City has voted the \$30,000 bond issue, mentioned last month, for the construction of water-works and sewerage system. Address The Mayor.

Watkinsville—Cotton Mill.—The proposed \$100,000 company noted last week will have E. B. Thompson for president, and A. J. Baxter of High Shoals, Ga., secretary-treasurer. A. W. Ashford, E. J. Crowley, A. C. Jackson, D. A. Osborn and H. A. Thomas will be the directors. Plans will be made for a 5000-spindle plant; construction to begin January 1.

#### KENTUCKY.

Campton—Fuel and Light Company.—Campton Fuel & Light Co. has been incorporated with \$8000 capital stock by Chas. Kerr, J. S. Botts, Lexington, Ky.; A. F. Byrd of Winchester, Ky., and others.

Corbin—Foundry.—C. P. Wortham and associates contemplate the establishment of foundry.

Corbin—Ice Plant.—It is proposed to establish an ice factory, and J. W. Nelson of Jellico, Tenn., is promoting the enterprise.

Lexington—Garbage Crematory.—The city will contract about January 1, 1906, for the erection of a crematory for the destruction of garbage, mentioned last week; Thos. A. Combs, mayor.

Lexington—Viaduct.—The city has voted affirmatively the \$27,000 bond issue previously reported for the construction of a viaduct over Ayers alley; Thos. A. Combs, mayor.

Louisville—Brewery.—The West Louisville Brewing Co., reported last month as increasing capital stock from \$30,000 to \$100,000, will erect a four-story brick building 50x150 feet; daily capacity 100,000 barrels of cream beer. About \$50,000 will be invested; L. Schreiber Sons Company, Cincinnati, Ohio, architect.

Louisville—Rice-hulling Machine.—The Growers & Grocers' Rice Co. has been organized with \$1,000,000 capital stock to manufacture and market a rice-hulling machine invented by S. Clark Buck. Building will be erected at once. Dr. Malcolm Dills of Louisville, Ky., is president; E. G. O'Donnell, vice-president; Lewis O'Donnell, secretary-treasurer, and S. Clark Buck, superintendent, all of Louisville.

Marietta—Water-works.—Town is reported as to vote on the issuance of \$27,000 of bonds for the construction of water-works. Address Town Clerk.

Muhlenberg County—Mineral Lands.—Reports state that L. Bailey of Madisonville, Ky., has purchased the mineral rights to 450 acres of land in Muhlenberg county, and arrangements will probably be made for its development.

Murray—Light, Heat and Power Plant.—The city will let franchise November 25 to the highest and best bidder for the construction and operation of light, heat and power plant; E. A. Hughes, mayor.

Paducah—Electric-light and Power Plant and Gas Plant.—Stone & Webster of Boston, Mass., have taken over the local electric-light and power and gas plant, and will operate as the Paducah Light & Power Co., John S. Bleecker, manager. The company will furnish light, heat and power by means of gas and electricity, having an output of electricity about 15,000 kilowatt hours daily and daily output of gas 120,000 cubic feet; H. T. Brown, engineer in charge. Address all communications to manager, 120 South 13th street.

Paducah—Knitting Mill.—It is reported that the Dixie Mills contemplates enlarging its hosiery mills.

Paducah—Telephone System.—The Paducah Home Telephone Co. is completing arrangements for constructing system from Paducah to Cairo, Ky., connecting with St. Louis, Mo.

Stearns—Concrete Bridge.—Reports state that the Collier Bridge Co. of Cincinnati, Ohio, has been awarded contract for the erection of a 516-foot concrete bridge over the Big South fork of the Cumberland river at the mouth of Rock creek for the Kentucky & Tennessee Railroad; J. E. Butler, superintendent.

Winchester—Sewerage System.—City has voted against the issuance of \$40,000 of bonds for the construction of sewerage system, previously mentioned; R. P. Scobee, mayor.

#### LOUISIANA.

Abbeville—Water-works and Electric-light Plant.—Arrangements are being completed and bids will be received until December 4 for furnishing material and constructing water-works and electric-light plant; Geo. W. Summers, secretary, and J. R. Leguene, mayor.\*

Convent—Ice-plant Improvements.—The St. James Ice & Bottling Co., Ltd., is reported, has let contract for the installation of a 30-ton ice machine. J. B. Caire is secretary-treasurer.

Crowley—Ice Plant.—It is reported that Armas Duro contemplates establishing 10-ton ice plant.

Hammond—Water-works.—Town will receive bids until December 6 for the construction of water-works, previously reported; C. H. Jenkins, Fayette, Miss., engineer in charge; James B. Adams, town clerk.\*

New Orleans—Ice-plant Improvements.—The Crescent Ice Co. is arranging for the installation of a 20-ton absorption machine; L. P. Hart, president.

New Orleans—Rice Hull Manufacturing.—Ricehulling Manufacturing Co., Ltd., has been incorporated, with \$10,000 capital stock, to acquire a process for the utilization of rice hulls and other products, manufacture and sell same. Leopold Levy is president; Joseph Beck, vice-president, and Gus Beck, secretary-treasurer.

New Orleans—Engineering and Construction Company.—Dilzell Engineering & Construction Co., Ltd., has incorporated, with \$10,000 capital stock, to engage in a general electrical and mechanical engineering and construction business. William T. Spranley is president; Walter A. Dilzell, vice-president and general manager, and Lyman C. Reed, secretary-treasurer.

New Orleans—Canal Improvements.—Reports state that the board of control of the New Basin canal contemplates expending

\$10,000  
ing sa

Shrev  
Water  
for con  
and bi  
November  
and 10-  
in cuts  
be cou

Verda  
Lumber  
000 cap  
C. H. T  
office. A

Cum  
ber Co.  
stock t  
tors, D  
shu, G  
Henry,  
ber of  
Sham

Thay  
Reports  
Co. of  
of abo  
Thayer  
develop

Aberd  
arrang  
M. Ack

Bilox  
ember  
bonds  
The Ma

Brook  
Supervi  
tract in  
erection  
across t

Egren  
and oth  
Lumber

Hattin  
franchi  
T. J. O  
Camp o  
operat

Iuka -  
Iuka I  
stock, b  
others.

Jackson  
thorized  
water-w  
to purc  
Address

Laur  
associ  
gett M  
stock to

Lyon  
Bobo, p  
plicati

New  
ments.  
bonds fo  
dress T

Bowlin  
Plant.  
has be  
stock b  
ford, Sa  
to opera

Indep  
depend  
\$10,000  
used for

Joplin  
Hawke  
rated la  
mine zir

Kans  
Freight  
nas City  
\$5,000,000  
road, in  
ding tr  
wooden  
tures a

St. Ch  
ported a  
about 15  
at a co  
Dwight  
neers.

St. Ch  
son & R  
erection  
\$50,000 w

St. Lou  
Archeme  
Incorpor

\$60,000 in extending, broadening and deepening same, facilitating traffic.

Shreveport—Sewerage System.—Shreveport Water-Works Co. is completing arrangements for constructing proposed sewerage system, and bids for the work will be received until November 24. About 12,000 feet of eight-inch and 10-inch vitrified pipe and cast-iron sewers in cuts varying from 6 feet to 30 feet will be constructed.\*

Verda—Lumber Mill.—The Bradford-Kees Lumber Co. has been incorporated with \$30,000 capital stock to operate a lumber mill. C. H. Teal of Colfax, La., is president; main office, Alexandria, La.

#### MARYLAND.

Cumberland—Lumber Mill.—The Kulp Lumber Co. has incorporated with \$10,000 capital stock to operate a lumber mill; incorporators, Daniel C. C. Caseman, John H. Holzshu, George L. Wellington, James A. McHenry, Monroe H. Kulp and Charles D. Wagner of Cumberland and G. Gilbert Kulp of Shamokin, Pa.

Thayerville—Timber-land Development.—Reports state that the Ravenscroft Lumber Co. of Oakland, Md., has purchased a tract of about 800,000 feet of timber land near Thayerville, and will arrange at once for its development.

#### MISSISSIPPI.

Aberdeen—Electric-light Plant.—The city is arranging to enlarge electric-light plant; J. M. Acker, mayor.

Biloxi—Water-works.—City will vote December 5 on the issuance of \$15,000 additional bonds for water-works purposes. Address The Mayor.

Brookhaven—Steel Bridge.—The Board of Supervisors of Lincoln county will let contract in December to lowest bidder for the erection of steel-span bridge 160 feet long across Fair river, 11 miles distant.

Egremont—Lumber Company.—R. M. Fry and others have incorporated the Egremont Lumber Co. with \$5000 capital stock.

Hattiesburg—Gas Plant.—City has granted franchise to T. J. Kearney of Hattiesburg, T. J. O'Beirne of Jackson, Miss., and H. A. Camp of Lumberton, Miss., to construct and operate gas plant.

Iuka—Hardware Company.—Chartered: Iuka Hardware Co., with \$10,000 capital stock, by W. O. Jackson, W. W. Harvey and others.

Jackson—Water-works.—The city has authorized the issuance of \$250,000 of bonds for water-works purposes. It is proposed either to purchase local plant or construct system. Address The Mayor.

Laurel—Vehicle Works.—B. F. Padgett and associates have incorporated the B. F. Padgett Manufacturing Co. with \$5000 capital stock to manufacture wagons, buggies, etc.

Lyon—Electric-light Plant.—Mrs. L. E. Bobo, planter and general merchant, contemplates installing a small electric-light plant.\*

New Albany—Electric-light-plant Improvements.—City contemplates issuing \$12,000 of bonds for improving electric-light plant. Address The Mayor.

#### MISSOURI.

Bowling Green—Electric-light and Power Plant.—The Pike County Light & Power Co. has been incorporated with \$7000 capital stock by Noah H. Ledford, Annie D. Ledford, Sam Sparrow and Isham C. Dempsey to operate electric-light and power plant.

Independence—Telephone System.—The Independence Home Telephone Co. will issue \$50,000 of bonds, \$25,000 of which will be used for betterments to plant.

Joplin—Zinc-mining and Milling.—The Hawkeye Zinc Mines Co. reported incorporated last week with \$100,000 capital stock to mine zinc, will also erect mills.

Kansas City—Steel or Concrete Bridges, Freighhouses.—It is reported that the Kansas City Southern Railroad will expend about \$5,000,000 in betterments along the line of its road, including improved facilities for handling traffic and the replacing of present wooden bridges by steel or concrete structures along the entire system; A. F. Rust, resident engineer.

St. Charles—Sewerage System.—City is reported as arranging for the construction of about 15 miles of 8-inch to 15-inch sewers at a cost of \$75,000; Burns & McDonnell, Dwight Building, Kansas City, Mo., engineers.

St. Charles—Shoe Factory.—Roberts, Johnson & Rand of St. Louis, Mo., have begun the erection of proposed shoe factory. About \$50,000 will be invested.

St. Louis—Farm Implements.—The Newsom Archimedian Plowing Machine Co. has been incorporated with \$50,000 capital stock by J.

Q. A. Newsom, J. N. Newsom, Hans Wulff and Walter A. Kelly to manufacture and deal in farm implements.

St. Louis—Railroad Device.—The Cast Steel Needle Beam Co. has been incorporated, with \$100,000 capital stock, to manufacture truss rod beams for railroad cars.

St. Louis—Lumber Company.—J. Shelley Vaughn, Callie C. Vaughn, Carl C. Vaughn and Eleanor V. Speer have incorporated the J. S. Vaughn Lumber Co., with \$5000 capital stock.

#### NORTH CAROLINA.

Charlotte—Cotton-mill Tubes.—The Charlotte Tubing Co. has been incorporated with \$20,000 capital stock by Drs. M. A. and C. A. Bland and J. B. Loughead to establish plant for the manufacture of cotton-mill tubes.

Fayetteville—Fertilizer Factory.—The Southern Cotton Oil Co., it is reported, will erect fertilizer factory.

Greensboro—Water-works.—City has let contract to C. S. Ordway, Martinsville, Va., at \$40,000 for the construction of reservoir, and to the Excelsior Wood Pipe Co. for piping in connection with proposed water-works. The contracts for pumphouse and pumps have not been awarded. It is estimated that 6000 barrels of cement and 6000 cubic yards of stone and the same amount of sand will be required in the construction, and 35,000 cubic yards of earth will be removed; J. M. Bandy, engineer in charge. (This item was previously referred to in this department.)

Greensboro—Shuttleblock Factory.—Worth-Sherwood Shuttleblock Co., previously reported incorporated with an authorized capital stock of \$20,000, will manufacture shuttle-blocks, having a capacity of 2,000,000 shuttle-blocks. All buildings are erected; H. B. Worth, secretary-treasurer.\*

Lexington—Knitting Mill.—The company referred to lately has incorporated as the Nobby Hosiery Mill Co. with capital stock of \$10,000 and privilege of increasing to \$100,000. It will erect a two-story brick building, 50x50 feet, to hold the equipment, including 42 machines, as was stated; F. N. Patterson of High Point, N. C., secretary-treasurer.

Lexington—Furniture Factory.—The Crowell Furniture Co. has been incorporated with \$10,000 capital stock by J. T. Hendrick, J. W. Crowell and others. Mr. Hendrick and associates were mentioned last month as having purchased the plant of the Rex Furniture Co. and to organize company for its operation.

Monroe—Cotton Mill.—It is reported that the Monroe Cotton Mills has awarded contract for 150 additional looms. This company was recently reported as to erect an additional building 40x200 feet in size.

Monroe—Cotton Mill.—Incorporated: The Icemelee Cotton Mills Co., with capital stock of \$150,000, by Charles Iceman, W. S. Lee, R. A. Morrow and others, for manufacturing cotton goods.

Redwood—Saw-mill, etc.—R. E. Schubert, W. W. Wood of Wheeling, W. Va., and associates have organized the Pickett Lumber Co. with an authorized capital stock of \$40,000. Arrangements will be made at once for the development of a tract of timber land which the company owns near Redwood.

Salisbury—Stone Quarry.—The American Stone Co. has been organized with \$10,000 capital stock by W. N. Dodge and others.

Shelby—Foundry and Machine Shop.—Cleveland Iron Works, reported incorporated last week with an authorized capital stock of \$10,000, will engage in repair and foundry work. A frame building with iron roof and sides will be erected; T. H. Abernathy, secretary-treasurer.\*

Washington—Lime-kilns, etc.—The Agricultural Lime Co., reported incorporated last week to manufacture lime, etc., has completed organization with W. S. Clark of Tarboro, N. C., president; George T. Leach, vice-president; H. M. Jenkins, secretary-treasurer, and J. A. Trickett, general manager, all of Washington; capital stock \$100,000. It is stated a fertilizer factory will also be established.

Weldon—Manufacturing.—Chartered: The House Manufacturing Co., with \$50,000 capital stock, by C. D. House and others.

Wilmington—Lumber Company.—Chartered: W. T. Sears Company, with \$50,000 capital stock, by W. T. Sears, S. M. Lloyd and P. H. Sears.

Winston-Salem—Concrete-block Factory.—J. J. Roddock, E. T. Ragland and others have incorporated the Winston-Salem Concrete Stone Co. with \$25,000 capital stock to manufacture concrete building blocks.

#### SOUTH CAROLINA.

Bamberg—Chartered: Armstrong-Johnson-Brabham Company, with \$6000 capital stock.

Georgetown—Water-works.—The Black River Water Co. has been incorporated with \$150,000 capital stock by E. L. Lloyd, D. J. Crowley, R. M. Barnes, F. B. Gardner, A. Harvey, Walter H. Andrews, P. J. Doyle and W. D. Morgan for furnishing water, the supply to be piped from the Black river.

Georgetown—Telephone System.—The Home Telephone Co. has been incorporated with \$15,000 capital stock by E. Rheem, W. T. Turbeville, H. B. Springs and LeGrand Walker.

Greenville—Ice Factory and Bottling Works.—W. R. Cothran, W. T. Jones and associates are organizing company with \$20,000 capital stock to establish ice factory and bottling works.

Hartsville—Water-works, Sewerage System and Electric-light Plant.—The city has available \$57,000 for the construction of water-works, sanitary and storm sewers and electric-light plant (previously mentioned), but only a portion of the work will be undertaken at the present time, probably not over \$30,000 to be expended; Charles C. Wilson, Columbia, S. C., engineer in charge.

Iva—Cotton Mill.—The Jackson Mills, reported last week, will increase its capital stock to \$325,000, as was stated. The company has decided to install 21,000 spindles and 650 looms, buildings to receive which are now being constructed. D. P. McBrayer of Anderson, S. C., is president.

Kershaw—Gold-mining.—It is reported that Dr. C. S. Brasington has purchased machinery and equipment and will arrange at once for the development of a gold mine in South Carolina.

#### TENNESSEE.

Brownsville—Hosiery Mill.—John Clinton and associates expect to organize about January 1 the hosiery-mill company lately reported as proposed. They have obtained subscriptions to more than half of the capital stock of \$20,000.

Chattanooga—Bridge.—City Engineer Hooke has completed plans for 11th-street bridge, and will submit same for approval to the Board of Public Works on November 14.

Chattanooga—Stockyards.—The Foust-Yarnell Stockyard Co. has been incorporated with \$10,000 capital stock by J. L. Foust, Oscar Yarnell, Grant Yarnell, Oria Yarnell and A. C. Foust to consolidate the Foust and Yarnell stockyards.

Chattanooga—Chair Factory.—It is reported that the Chattanooga Chair Co. will rebuild plant reported burned at a loss of \$7000.

Greenville—Furniture Factory.—R. B. Hall and associates have organized company with an authorized capital stock of \$10,000 to establish furniture factory.\*

Harriman—Saw-mill, etc.—It is reported that the Baldwin Piano Co. of Cincinnati, Ohio, contemplates establishing saw-mill and lumber yard.

Johnson City—Canning Factory.—A. D. Hughes will install in the early spring canning factory for canning tomatoes, etc.\*

Knoxville—Steel Plant.—It is reported that the Knoxville Iron Co. contemplates the construction of steel plant at Lonsdale.

Knoxville—Construction Company.—Chartered: The Oliver-Stewart Company, with \$25,000 capital stock, by W. J. Oliver of Knoxville, A. B. Stewart of Columbia, S. C.; Geo. F. Parkes of Nashville, Tenn., and associates, for a construction business. The company has contract to construct power plant for the Chattanooga-Tennessee Power Co., previously fully reported.

Knoxville—Electrical Supplies.—The Electric Supply & Construction Co., recently incorporated with \$25,000 capital stock, has completed organization with W. W. Scarborough, president and treasurer, and W. J. Radcliffe, secretary and general manager; office, 705 Gay street.

Memphis—Cold-storage Plant, Stable, etc.—The Bohen-Huse Ice Co. will expend \$100,000 in improvements to plant, including the erection of a two-story brick stable 110x230 feet, to cost \$35,000; improvements to freezing and storage departments, and the erection in South Memphis of a 1000-ton cold-storage plant; Shaw & Pfeil, architects.

Memphis—Brick Works.—The South Memphis Brick & Manufacturing Co. has been organized with \$150,000 capital stock by Frank H. Reid, Lee Mallory and E. B. Merry of Augusta, Ga., to manufacture brick. A site of 10 acres has been purchased on which to erect plant. Dry yards will cover 150x700 feet. Two-story building 60x150 feet will be erected and equipped as machine-rooms for making modern tools for elevating, repairing and for brick-yard supplies. Clay sheds will cover 100x400 feet. Clay will be conveyed to machine-rooms from clay pit by continuous cable system. Two 20,000 capacity modern

dry-press machines will be installed; one of 75,000 capacity for stiff mud, the other of 40,000 capacity for soft mud. The most modern machinery for burning will be used, embracing the system of using waste heat from kilns that have been burned for drying and water-smoking green brick. Electricity will be the motive power. Output of plant will be 150,000 bricks per 10 hours.

Memphis—Saw-mill and Veneer Plant.—Reports state that C. L. Willey of Chicago, Ill., representing veneer manufacturers, has purchased 15 acres of land on which to erect saw-mill and veneer plant. Mr. Willey was previously mentioned in this department as investigating with a view to locating plant.

Nashville—Timber and Coal Land, Oil Wells, etc.—Tennessee Land & Coal Co., reported incorporated last month under Monteagle, Tenn., has completed organization with J. E. Jones, president; L. T. Smith, vice-president; S. E. Sims, secretary, and C. A. King, treasurer. The company proposes to develop timber, coal and oil lands, and has purchased a controlling interest in the Obeds River Oil Co. of Poplar Cove, Tenn., and the Federal Oil Co. of Wayne county, and a one-half interest in the Poplar Grove Oil Co. in Fentress county; R. J. Moscrip, Mayland, Tenn., engineer in charge.

Nashville—Coal and Timber Company.—Central Tennessee Coal & Timber Co. has incorporated, with \$100,000 capital stock, to deal in coal, timber, etc.; I. L. Fairbanks, Augusta, Maine, president and treasurer.

Nashville—Transportation Company.—Chartered: The Ohio & Tennessee River Transportation Co., with \$10,000 capital stock, by Joseph W. Byrns, John C. Homerlin, Hugh Farrell, John E. Fisher and A. R. Tichnor.

Nashville—Heading Factory.—J. F. McLean has begun the erection of plant for the manufacture of barrel heads, previously reported. About \$20,000 will be invested. Two large dry-kilns will be included.

Trenton—Gas Plant.—City has granted franchise to Arthur R. Low and associates of Philadelphia, Pa., to erect and operate gas plant.

#### TEXAS.

Austin—Sulphur Mines and Refinery.—Dispatches state that a company is being organized to develop sulphur deposits and build a sulphur refinery in El Paso county, but the names of the interested parties are not stated. J. J. Terrell may possibly be interested.

Ballinger—Water-works.—The city, it is reported, will receive bids until December 1 for the construction of water-works, for which \$12,000 is available; J. W. Powell, mayor.\*

Beaumont—Lumber Plant.—The Sabine Tram Co. is making improvements to mill, installing more power and additional equipment for increasing capacity.

Beaumont—Oil Wells.—Chartered: Acorn Oil Co., with \$10,000 capital stock, by M. Guiterman, J. E. Broussard and I. R. Bordes.

Beaumont—Barrel-hoop Factory.—Reports state that N. M. Snyder of Lincoln, Neb., is investigating with a view to locating a barrel-hoop factory having a capacity of 6000 feet of hoops daily.

Belton—Metal Polish.—R. A. Baggett, P. O. Box 106, has begun the development of a mineral deposit, mentioned last week as discovered on his property, refining and preparing it as a polish for metals.

Big Sandy—Crate Factory, etc.—Big Sandy Crate Manufacturing Co., reported incorporated last week with \$25,000 capital stock, has completed organization with W. T. Wheeler, president; G. D. Stoner, secretary-treasurer. A main building two and three-quarters stories high, 50x100 feet, with several smaller buildings, will be erected and equipped for the manufacture of crates, boxes, veneering, etc. About \$10,000 will be invested. Robert Howell, architect, and Lee Kay, engineer in charge.\*

Brenham—Sewerage System.—It is reported that the city will construct sewerage system in the northern section; William Lusk, mayor.

Dallas—Type Foundry.—Barnhart Type Foundry Co. has been incorporated with \$25,000 capital stock by R. C. Dyer, M. P. Hays of Dallas, M. W. Barnhart, E. W. Conable, C. R. Murray, all of Chicago, Ill.

Ennis—Sewerage System.—Reports state that C. B. Lewis has applied for franchise to construct sewerage system.

Fort Worth—Water-works and Electric-light Plant.—The Capps Land Co., recently organized with \$200,000 capital stock to develop South Hemphill Heights, is arranging for the construction of water-works and electric-light plant. It is proposed to lay six

and one-half miles of mains: Wm. Capps, president.

Gainesville—Oil Wells.—Chartered: Bomar County Oil Co., with \$100,000 capital stock, by J. C. Whaley, D. T. Lacy, Val Peers, F. R. Sherwood, F. A. Jones, E. P. Bomar of Gainesville and R. F. Heflin of Sherman, Texas, to drill for oil.

Glen Flora—Irrigation Plant.—The Kinchenhoffer Irrigating Co. will install an additional unit—a 36-inch pump—to plant, lift being 50 feet: F. M. Bullock, manager.

Houston—Hides and Furs.—Chartered: The John Flanigan Company, with \$150,000 capital stock, by R. E. Payne, E. W. Cruendler and associates, to deal in hides and furs.

Houston—Railroad Repair Shops and Roundhouse.—It is reported that the Houston, Sabine & Red River Railway Co., Ed. Kennedy, manager, has purchased site on which to erect shops and roundhouse.

McKinney—Gas Plant.—The Industrial Gas & Construction Co. of Chicago, Ill., it is reported, will begin the construction of gas plant, for which franchise was recently granted.

Midlothian—Ice Factory, Light and Power Plant.—Midlothian Ice, Light & Water Co. has been incorporated with \$20,000 capital stock by L. O. Moore, W. W. Major, F. A. Posey and T. M. Dilts to operate ice factory, gas, electric-light and power plant.

San Antonio—Construction Company.—Chartered: J. P. Nelson Construction Co., with \$100,000 capital stock, by J. P. Nelson, A. B. Spencer, B. R. A. Scott, R. T. Orth, all of San Antonio, and L. M. Oppenheimer of Austin, Texas, to do general construction work.

San Antonio—Furnishing Company.—Chartered: Home Furnishing Co., with \$20,000 capital stock, by A. R. McCreary, C. M. Phelps and C. E. Gibson.

San Marcos—Street Improvements.—City has voted affirmatively the \$3000 bond issue, previously mentioned, for street improvements; J. R. Porter, mayor.

San Marcos—Bridge.—It is reported that the San Marcos Valley Interurban Railway is arranging for the construction of a bridge across the Blanco river.

#### VIRGINIA.

Alexandria—Machine Shop and Car Barn.—Reports state that the Washington, Alexandria & Mount Vernon Railroad Co. will enlarge machine shop and car barn to twice their present capacity; office, Washington, D. C.

Edinburg—Lumber Mill.—Wrenn Lumber & Manufacturing Co. has been incorporated with an authorized capital stock of \$10,000 to manufacture lumber; incorporators, W. A. Wrenn, J. F. Holtzman of Edinburg and J. H. Brewer of Washington, D. C.

Front Royal—Woodworking Plant.—The Locust Pin Co. has incorporated with an authorized capital stock of \$10,000 to manufacture wood into pins. S. L. Hoover of Winchester, Va., is president; M. J. Fulton, secretary, and O. F. Wallihan, treasurer, both of Front Royal.

Fredericksburg—Cemetery.—Chartered: Oak Hill Cemetery Co., with an authorized capital stock of \$5000. Henry Warden is president; A. B. Botts, vice-president, and B. F. Whiteman, secretary.

Lynchburg—Shoe Factory.—It is reported that the Lynchburg Shoe Co. has purchased site with a frontage of 145 feet, on which the erection of factory building is contemplated.

Mineral—Publishing.—Incorporated: The Mineral Mirror, with \$2000 capital stock, for the publication of a newspaper. M. B. Quisenberry is president, and James G. Boxley, secretary and general manager.

Newport News—Cigar, Cigarette and Tobacco Factory.—It is reported that the American Tobacco Co., New York, N. Y., has secured three-story brick building, 75x100 feet, which will be equipped for the manufacture of cigars, cigarettes, smoking and chewing tobacco.

Newport News—Shirt Factory.—It is reported that Isaac Walderman, 1633 East Baltimore street, Baltimore, Md., has purchased the plant of the Newport News Shirt Manufacturing Co., which will be improved and operated. New machinery will be installed.

Norfolk—Dredging and Filling.—The Tide water Railway Co. has let contract to the Atlantic, Gulf & Pacific Dredging Co., Savannah, Ga., for filling in the 12 acres of land acquired on the west banks of the southern branch, dredging the docks, etc. J. C. Tisdale will supervise the work.

Norfolk—Electric-light-plant Improvements. The Norfolk Railway & Light Co., which recently expended \$75,000 in improvements to plant, it is reported, contemplates making

further extensions, increasing lighting facilities, at a cost of \$100,000.

Norfolk—Mineral Waters.—Incorporated: Norfolk Mineral Water Co., with \$10,000 capital stock, to sell mineral water. J. W. Jordan, Jr., is president; J. P. Buxton of Portsmouth, Va., secretary, and J. Paul Johnson, treasurer.

Norfolk—Toy Factory, etc.—Essex Manufacturing Co. has incorporated with \$25,000 capital stock to manufacture toys, books, etc.; Thomas H. Pace, president and general manager, and Williana H. Burt, secretary-treasurer, P. O. Box 885.

Norton—Steam Laundry.—Home Steam Laundry Co. has been incorporated with \$5000 capital stock to operate a steam laundry. M. Cousins is president; W. A. Trotter, vice-president and general manager, and E. H. Kilgore, secretary-treasurer. The company has purchased, will improve and operate the steam laundry of B. F. Richmond & Sons.

Norfolk—Steel Pier.—Reports state that the Norfolk & Western Railway Co., C. N. Churchill, Roanoke, Va., chief engineer, is completing arrangements for the construction of proposed \$1,000,000 steel pier.

Norfolk—Telephone Exchange.—The Southern Bell Telephone & Telegraph Co. (main offices, Atlanta, Ga.) is receiving bids for the erection of proposed telephone exchange; to be five stories on Plume street and three stories on Williams street, have pressed-brick and terra-cotta fronts, and be of the most approved fireproof construction.

Norfolk—Realty Company.—Chartered: Fairfax Realty Corporation, with George W. Dey, president; D. L. Groner, secretary, and F. A. Porter, treasurer; authorized capital stock \$100,000.

Norfolk—Drug Company.—Southern Drug Co. has been incorporated with an authorized capital stock of \$50,000. J. A. McCarrick is president; A. H. Mowry, vice-president and treasurer, and J. P. Mowry, secretary.

Richmond—Packing Plant.—The Virginia Packing Co. will rebuild plant reported burned at a loss of \$200,000.

Richmond—Bank, Store and Office Fixtures. American Furniture & Fixture Co., manufacturing bank, store and office fixtures, is erecting addition 60x130 feet to factory, giving a total floor space of 34,000 feet. About \$9000 will be invested; office, 2817-2829 East Main street.

Richmond—Gas-plant Improvements.—A resolution has been offered to issue \$600,000 of bonds for rebuilding gas plant. Address The Mayor.

Richmond—Drug Company.—Incorporated: South Atlantic Pharmaceutical Co., with T. A. Miller of Richmond, president; G. K. Grantham of Dunn, N. C., vice-president, and W. E. Brown of Petersburg, Va., secretary; authorized capital stock \$50,000.

Richmond—Iron Works, etc.—Richmond Manufacturing Co., reported incorporated last week with \$25,000 capital stock, will manufacture gasoline engines, architectural iron work, iron stair work, fire-escapes, brass and wire work, etc.; W. B. DePoy, general manager.

Roanoke—Telephone Exchange.—The Virginia-Tennessee Telephone Co. has purchased site, 37x150 feet, on which to erect proposed telephone exchange.

Suffolk—Lumber Company.—Chartered: Colross Lumber Co., with an authorized capital stock of \$25,000. W. S. Johns of Norfolk, Va., is president; Kinsey Johns, Jr., of Norfolk, secretary, and James H. Corbett of Suffolk, treasurer.

Suffolk—Woodworking Plant.—Suffolk Woodworking Corporation has been incorporated with an authorized capital stock of \$5000. J. A. Ashburn of Myrtle, Va., is president; W. T. Joyner, general manager, and Jackson Ely, secretary-treasurer, both of Suffolk.

Roanoke—Public Improvements.—City will vote on the issuance of \$375,000 of bonds for street and sewer purposes. Address The Mayor.

Tazewell—Telephone System.—Interstate Telephone Co. has incorporated with an authorized capital stock of \$1000 to construct and operate telephone system. J. W. Chapman is president; H. G. McCall, vice-president, both of Tazewell, and George Wolf, secretary-treasurer, Berwind, W. Va.

West Point—Ice Factory.—It is reported that the West Point Oyster Co. will erect ice factory and equip for a daily capacity of 15 tons.

#### WEST VIRGINIA.

Ansted—Coke Ovens.—The recent report that the Gauley Mountain Coal Co. has begun the construction of 500 coke ovens was incorrect.

Camden-on-Gauley—Lumber Mill.—It is reported that the Cherry River Boom & Lumber Co. of Richwood, W. Va., has purchased, will improve and operate the plant of the Gauley Company.

Elkins—Timber Land.—The Elkins Pail & Lumber Co. it is reported, has purchased from D. R. Baker of Beverly, W. Va., 1800 acres of timber land at \$17,000.

Elm Grove—Enameling Works.—Chartered: The National Enameling Iron Co., with \$125,000 capital stock, by W. A. Islett, Charles W. Franzheim, W. J. Mays, A. S. List and Alfred Paul, to manufacture enameling bathtubs, sinks, etc. The company has taken over, will remodel and operate the plant of the Wheeling Heating & Ventilating Co.

Elm Grove—Gas Wells and Pipe Lines.—It is reported that the Virginia Oil & Gas Co. is arranging for the expenditure of \$150,000 in improvements, including the sinking of additional wells near Elm Grove and extending its lines into Wheeling, W. Va.

Huntington—Land Improvement.—River View Land Co. has been incorporated with \$16,000 capital stock by Edward Roderick, Richard Roderick, F. W. Ward of Scranton, Pa.; David J. Roderick of Hazelton, Pa., and John Roderick of Wilkesbarre, Pa.

Huntington—Street-paving and Sewerage System.—City has voted affirmatively the issuance of \$55,000 of bonds for street-paving and \$45,000 of bonds for sewerage system, previously reported. Address The Mayor.

Jacksonburg—Nitroglycerine Explosives.—The Jacksonburg Torpedo Co. has incorporated with \$20,000 capital stock to manufacture nitroglycerine explosives; incorporators, T. L. Hall, W. C. Ribb, W. B. Culbertson, C. M. Clelland of Jacksonburg and E. L. Robinson of New Martinsville, W. Va.

Keyser—Telephone System.—The Chesapeake & Potomac Telephone Co., 711 St. Paul street, Baltimore, Md., which recently purchased the property of the Piedmont & Keyser Telephone Co., is making extensive improvements at Keyser and Piedmont by the installation of new instruments, increasing the capacity, and will arrange at once for rebuilding the entire system. When completed there will be four copper metallic circuits between Keyser and Piedmont. C. J. Webb is in charge of the work.

Mannington—Gas and Oil Wells.—Mannington Gas Co. has incorporated with \$50,000 capital stock to produce and deal in gas and oil; incorporators, O. N. Keen, F. R. Stewart, D. F. Hollobaugh and Wm. Hess of Mannington and W. C. McBride of Washington, Pa.

Martinsburg—Fruit Orchard.—Alex. Cohen, F. E. Wilson, Herbert L. Alexander, Charles P. Light and Wilbur H. Thomas have incorporated the Highland Orchard Co. with \$50,000 capital stock. The company has purchased 1500 acres of land on which to plant an apple orchard. C. P. Light will be manager.

Paden City—Glass Factory.—The Duquesne Glass Co., recently organized by A. J. Rittman and associates of Pittsburgh, Pa., have secured site on which to locate glass factory.

Richwood—Saw-mill.—Reports state that the Lackawanna Lumber Co. of Pennsylvania is preparing to erect a band-saw mill near Richwood; to be of fireproof construction, the framework, etc., to be of steel.

Tioga—Saw-mill.—The Tioga Lumber Co., previously reported incorporated with \$300,000 capital stock, has just completed and put in operation its double band mill.

West Fork—Bridge.—The West Fork Bridge Co. has been organized by T. A. Brown of Elizabeth, W. Va., and others to construct a bridge across West Fork river, connecting West Fork and Creston, W. Va.

#### INDIAN TERRITORY.

Ardmore—Telephone System.—The city has granted franchise to F. B. McElroy and associates for the construction of telephone system, previously mentioned.

Ardmore—Gas Plant.—City has granted franchise to E. J. Maire, Frank Maire, J. S. D. Nealy and L. S. Nealy, all of Lima, Ohio, to construct and operate gas plant.

Davis—Water-works.—The city is completing arrangements for water-works, for which \$25,000 was previously reported available. Bids will be opened November 28. It is proposed to construct power-house 31x41 feet (inside dimensions), brick foundation and corrugated-sheet-iron superstructure; equipment to include one compound duplex pumping engine capable of delivering 400 gallons per minute against a head of 200 feet, with a steam pressure of 100 pounds, piston speed of 75 feet per minute; boiler of tubular return-flue type, with heating surface of not less than 750 square feet, built for a working

pressure of 100 pounds and fitted with a dome smokestack, smoke box, etc.; boiler, feed pump, hydrants, valves, pipe, 50,000-gallon steel tank and 110-foot steel tower, etc.; J. R. Clemons, mayor; W. P. Bullock, engineer.\*

Fort Gibson—Electric-light and Power Plant.—The Fort Gibson Light & Power Co. has been incorporated with \$25,000 capital stock to operate electric-light and power plant.

McCurtain—Coal Mines and Coke Ovens.—The Fort Smith & Western Railroad, it is reported, will arrange for opening mine No. 3, increasing the present capacity. The company was previously mentioned as to erect 100 additional coke ovens, which will increase the output from 7000 to 48,000 tons of coke per month. W. E. Crane, Fort Smith, Ark., is general manager.

Quapaw—Mining Company.—Hobo Mining Co. has been incorporated with \$100,000 capital stock by S. A. Smith, H. H. Craney, M. S. Parker, H. P. Craney and C. W. Craney.

#### OKLAHOMA TERRITORY.

Altus—Water-works.—City will vote December 19 on the issuance of \$30,000 of bonds for the construction of proposed water-works. Address The Mayor.

Elk City (P. O. Busch)—Telephone and Telegraph System.—G. F. Patterson, M. F. Spurlock, E. M. Scannell, Charles McLoud, T. J. Baldwin, Joe Scannell and M. Scannell of Elk City, W. T. Patterson and E. M. Scannell of Weatherford, Texas, have incorporated the United Telephone & Telegraph Co. with \$100,000 capital stock to construct telephone and telegraph system.

Kremlin—Mill and Elevator.—Chartered: The Kremlin Mill & Elevator Co., with \$25,000 capital stock, by William A. Pope, E. E. Bennett and John C. Myers.

Meeker—Oil and Gas Wells.—The Cleveland Independent Oil & Gas Co. has been incorporated with \$500,000 capital stock by Wm. H. Miller, W. D. Housh, T. M. Smith of Meeker, J. C. Freeman and D. Balmer of Wellington, O. T.

Mountain Park—Lumber and Supply Company.—W. B. Sparks, C. A. Sparks and S. M. Sparks have incorporated the Mountain Park Lumber & Supply Co. with \$7500 capital stock.

Oklahoma City—Mining and Manufacturing Company.—The Commercial Mining & Manufacturing Co. of Oklahoma City, Dallas, Texas, and Mena, Ark., has been incorporated with \$1,000,000 capital stock by E. P. Spears, J. A. Mohoney and J. W. Pinson of Dallas, Texas; I. H. Stetler of Mena, Ark.; George A. Teague and E. P. Moseley of Lexington, O. T.

Oklahoma City—Concrete Machinery.—The National Continuous Concrete Machine Co. has been incorporated with \$100,000 capital stock by John W. Wilson, R. A. Barnes, M. J. Mulconney and J. E. Pitts.

Pawnee—Oil and Gas Wells.—The Western Oil & Gas Co. has been incorporated with \$1,000,000 capital stock by T. M. Broadbudd of Pawnee, Joseph M. McElroy, Myron Matson of Bradford, Pa.; Frederick H. Steele of Pittsburgh, Pa., to drill for oil and gas.

Prague—Household Novelties.—Empire Manufacturing Co., reported incorporated last month, will erect building 40x60 feet and equip for manufacturing household novelties. About \$2000 will be invested. S. L. Dryden is president; N. S. Smith, vice-president, and B. A. Smith, secretary-treasurer.\*

Weatherford—Telephone System.—The Farmers' Mutual Telephone Exchange, reported incorporated last week with \$2500 capital stock, has completed organization with Dr. Robert X. Wade, president; W. J. Stone, vice-president; J. H. Anderson, secretary, and Will Bradley, treasurer.\*

Woodward—Electric-light Plant.—It is reported that the O'Neill Engineering Co., Dallas, Texas, has charge of the installation of electric-light system for the Woodward Cotton Co.

#### BURNED.

Athens, Ga.—Deadwiler & Co.'s cotton warehouse: loss \$100,000.

Birmingham, Ala.—Moore & Handley Hardware Co.'s building; Avondale Laundry Co.'s plant: loss \$10,000; Philip Carey Manufacturing Co.'s plant: loss \$12,000.

Charlotte, N. C.—Zack Taylor's cotton gin.

Chattanooga, Tenn.—The Chattanooga Chair Co.'s plant: loss \$7000.

Fredericksburg, Va.—Fredericksburg Ice Co.'s plant: loss \$15,000.

Gate City, Va.—The Myrtle Hotel: loss \$5000.

Leesburg, Va.—Leesburg Steam Laundry Co.'s plant: loss \$4000.

Poco Son's Rich plant

\* Me are w found and S

Abin been Johns ments will b mittee

And Scho of \$500 buildin

Anna will l

Navy the fo ment s of pro Academ tained deposit

Ashei berain engag for Fr

Atla contra Sund plans appar sashes tract

Atla Broad plans erected

Atla Truste consider proof About

Bato Stewar consider

Beau report Beaum contem busines

Beev McMin M. Hen man ha to eec the str

Carb be aske posed Kay, G Guthrie

Charl Rogers building, a three electric call be

Charl Bids w the off

ed with a  
c. ; boiler,  
ipe, 50,000  
steel tower,  
P. Bullock,

nd Power  
Power Co.  
000 capital  
nd power

e Ovens,  
d. it is re-  
aine No. 3.  
The com-  
s to erect  
n will in-  
00 tons of  
ort Smith,

o Mining  
0,000 cap-  
Crane, M.  
V. Crane,  
V. Crane,

Y.  
ote Decem-  
bonds for  
ter-works.

phone and  
on, M. F.  
McLoud,  
L. Scannell  
and E. M.  
ave incor-  
Telegraph  
construct

chartered:  
with \$25,000  
E. E. Bar-

Cleveland  
een incor-  
y Wm. H.  
Smith of  
Balmer of

ply Com-  
and S. M.  
tain Park  
0 capital

facturing  
& Manu-  
Dallas,  
incor-  
by E. P.  
Pinson of  
na, Ark.;  
y of Lex-

ery.—The  
chine Co.  
0 capital  
arnes, M.

Western  
ated with  
daddus of  
n Matson  
Steele of  
as.

Empire  
orporated  
feet and  
l. S. L.  
ice pres-  
reasurer.\*

— The  
range, re-  
2500 cap-  
on with  
J. Stone,  
secretary,

It is re-  
Co., Dal-  
lation of  
ard Cot-

s cotton

ey Hard-  
ry Co's  
mfactur-

ton gin  
tanooga

ng : loss

Laundry

Pocomoke City, Md.—James T. Young & Son's saw and planing mill.

Richmond, Va.—The Virginia Packing Co.'s plant; loss \$200,000.

## BUILDING NOTES.

\* Means machinery, proposals or supplies are wanted, particulars of which will be found under head of "Machinery, Proposals and Supplies Wanted."

Abingdon, Va.—Town Hall.—Plans have been completed by Architect Mitchell of Johnson City, Tenn., for proposed improvements to town hall, and bids for the work will be received at once by the building committee.

Andrews, N. C.—School Building.—Andrews School District has authorized the issuance of \$5000 of bonds for the erection of school building: J. Q. Barker, chairman board of trustees.

Annapolis, Md.—Experiment Station.—Bids will be received until December 20 at the office of the Navy Department, Washington, D. C., for the foundation for the first building, experiment station. Specifications and blank forms of proposals will be furnished on application to the superintendent of the Naval Academy. A set of drawings may be obtained at the office of the superintendent on deposit of \$5: Truman H. Newberry, acting secretary.

Ashland, Ga.—Courthouse.—W. W. Chamberlain & Co., Birmingham, Ala., have been engaged to prepare plans and specifications for Franklin county's proposed courthouse.

Atlanta, Ga.—Building.—D. C. Allen has contract to erect four-story brick and stone Sunday-school building 100x70 feet after plans by Butt & Morris, and bids for heating apparatus, plumbing supplies, windows and sashes are now being received by the contractor.

Atlanta, Ga.—Warehouse.—C. W. McClure has purchased site on which to erect a warehouse.

Atlanta, Ga.—Theater.—Fuller Clafin, 1440 Broadway, New York, N. Y., is preparing plans for theater reported last month to be erected by Joel Hurt.

Atlanta, Ga.—Hospital.—The Board of Trustees of the Presbyterian Hospital are considering plans for the erection of a fireproof hospital to accommodate 75 patients. About \$50,000 will be expended.

Baton Rouge, La.—Masonic Temple.—C. D. Stewart has contract at \$28,950 for the erection of proposed Masonic Temple; to be three stories, of brick.

Beaumont, Texas—Business Building.—It is reported that S. Blanchette, W. C. Averill of Beaumont and K. B. Seale of Jasper, Texas, contemplate the erection of a two-story brick business building to have a frontage of 25 feet.

Beeville, Texas—Business Building.—The Bailey Mills Co., Victoria, Texas, has contract to erect \$10,000 brick business house for Mr. Praeger.

Birmingham, Ala.—Store Building.—It is reported that the Moore & Handley Hardware Co. will rebuild structure reported burned.

Birmingham, Ala.—Dwelling.—Mrs. Mary Jeffries has secured permit to erect a two-story pebble-dashed frame dwelling at a cost of \$4500.

Black Mountain, N. C.—Hotel.—Reports state that John R. Bell and F. R. Manly of Mount Olive, N. C., have purchased two acres of land and will erect \$10,000 hotel.

Bluefield, W. Va.—Masonic Temple.—Masonic Trust Association, reported incorporated last week to erect lodge building, will erect fireproof structure at a cost of \$30,000, and bids for the construction will probably be let January 1. Architect has not been engaged.\*

Brevard, N. C.—Business Building.—J. W. McMinn, Hilary B. Brunot, J. F. Hays, R. W. M. Henry, T. S. Boswell and Thomas H. Shippman have purchased site 63x163 feet on which to erect a three-story building, and plans for the structure are now being prepared.

Carbon Hill, Ala.—Town Hall.—Bids will be asked at once for the construction of proposed town hall after plans by Edgar B. Kay, engineer, Tuscaloosa, Ala.; B. B. Guthrie, town clerk.

Charlotte, N. C.—Office Building.—Hicks & Rogers have submitted plans for an office building to be erected by local lawyers; to be a three-story building and cost \$50,000. An electric elevator and a system of electric call bells will be installed.

Charleston, S. C.—Depot and Train Shed.—Bids will be received until November 20 at the office of Frank P. Milburn, architect,

Columbia, S. C., for proposed passenger station and train shed to be erected by the Charleston Union Station Co.

Chattanooga, Tenn.—Lodge Building.—Hamilton Temple Lodge, I. O. O. F., will erect a \$40,000 lodge building, and a company will be chartered by J. H. Gillespie, A. A. Stong, G. W. Ruston, D. J. Saul, W. W. Harkins and associates for this purpose.

Dothan, Ala.—Opera-house.—J. W. Burney has prepared plans for a one-story brick opera-house, 60x106 feet, stone trimmings, composition roofing and metal cornice, to cost \$15,000.

El Paso, Texas—Opera-house.—L. M. Crawford, lessee of the Myer Opera-House, reported burned at a loss of \$100,000, will arrange for rebuilding the structure.

Enid, Ok. T.—Courthouse.—Bids will be received until November 27 for the erection of courthouse for Garfield county: A. A. Crowell, county clerk. (This item previously mentioned.)

Fort St. Philip, La.—Boathouse.—Bids will be received until December 2 at the office of chief quartermaster, Department of Texas, San Antonio, Texas, and at office of quartermaster, Jackson Barracks, Louisiana, for the construction of a boathouse at Fort St. Philip in accordance with plans and specifications on file at San Antonio, Texas, and Jackson Barracks, Louisiana. Bidders are required to furnish the name and place of business of the manufacturer or manufacturers who will furnish the materials. Information furnished on application. United States reserves usual rights. Envelopes to be marked "Proposals for Boathouse at Fort St. Philip" and addressed to the quartermaster, Jackson Barracks, Louisiana, or to Robert Stevens, C. Q. M., San Antonio, Texas.

Fort Worth, Texas—Office Building.—John M. Shelton has purchased site 65x35 feet on which it is stated an office building will be erected.

Fort Worth, Texas—Sanitarium.—Dr. F. D. Thompson, previously reported as having purchased site 106x120 feet on which to erect sanitarium, is having plans prepared by S. Wemyss Smith and L. G. Schenck for the erection of building to cost \$16,000.

Gainesville, Fla.—University Buildings.—The Florida Education Board of Control will let contract November 24 for the erection of university buildings after plans by Edwards & Walter, Columbia, S. C. About \$1,500,000 will be expended in buildings and grounds.

Galveston, Texas—Dwelling.—Bids are being received for the erection of a \$15,000 residence for L. H. Kempner, C. W. Bulger & Son of Galveston and Atlee B. Ayres, 228 Commerce street, San Antonio, Texas, prepared the plans.

Galveston, Texas—Building.—A. L. Pierson is having plans prepared by Geo. B. Stone for the erection of a four-story brick building 13x120 feet.

Galveston, Texas—Store and Apartment-house.—D. N. McKenzie, 2107½ Postoffice street, is preparing plans for a three-story brick store and apartment-house, 43x120 feet, to be erected by Charles Roberts.

Glencoe, Ok. T.—Hotel.—C. K. Lewis has begun the erection of a two-story stone hotel to cost \$800.

Griffin, Ga.—Courthouse.—Spalding county has had plans prepared for the erection of a \$65,000 courthouse. Address County Judge.

Griffin, Ga.—Office Building.—W. J. Kincaid contemplates the erection of six-story office building 55x90 feet, to cost \$75,000.

Haddock, Ga.—Store and Office Building.—Winder Lumber Co. of Winder, Ga., has contract to erect two-story store and office building 30x50 feet for C. W. Middlebrooke.

Hempnill, Texas—Courthouse.—Sabine county has voted the \$20,000 bond issue (previously mentioned) for the erection of courthouse: J. A. Watson, clerk.

Hermanville, Miss.—Bank Building.—A new bank, organized by Dr. E. H. Jones and associates, will erect a building.

Hinton, W. Va.—Bank Building.—The Citizens' Bank, reported last week as to erect building, will build a three-story fireproof structure 24x50 feet, equipped with hot-water heating plant, electric lights, etc.

Jacksonville, Fla.—Dwelling.—Henry Clark has had plans prepared by J. R. and Richard Ryan, Birmingham, Ala., for the erection of two-story residence 51x58 feet, of brick and stone veneered.

Jacksonville, Fla.—Apartment-house.—Halewood Woodcock Company has contract to erect warehouse for C. C. Ensminger, 3 Blum Building (previously reported), after plans by Wm. Vauncey, Shelbyville, Ind.; building to be three stories, 41x90 feet, equipped with steam-heating plant, electric and gas fixtures, etc.\*

Knoxville, Tenn.—Office Building.—John Loop & Co. are arranging for the erection of business block.

Kansas City, Mo.—Building.—The Union Bank Note Co. has had plans prepared by L. Grant Middebaugh and received bids for a four-story brick building 57x90 feet, to cost \$30,000.

Knoxville, Tenn.—Lodge Building.—Knoxville Lodge No. 138, I. O. O. F., is considering the purchase of site 50x90 feet for the erection of three-story brick lodge building.

Knoxville, Tenn.—Store Building.—Brimer & England have contract to erect store building for Miller Bros., for which Barber, Klutz & Graf were previously reported as preparing plans: to be five stories and cost \$70,000.

Laurinburg, N. C.—Sanitarium.—Dr. D. M. Prince will receive bids until December 1 for a three-story sanitarium to be erected by the Laurinburg Hospital Co. after plans by H. E. Bonitz, Wilmington, N. C.; building to be of press brick, granite and stone, fireproof construction, concrete floors, metal cornices, electric lights, and cost \$10,000.

Lebanon, Ky.—Store Building.—John B. Carlisle & Co. are arranging to build an additional story 38x117 feet to building.\*

Lillington, N. C.—Jail Building, etc.—Harnett County Commissioners will receive bids until January 1, 1906, for the construction of a jail and certain fireproof record-vault work in the county courthouse. Bids will be received on the work separately and together. For plans, specifications and full information address C. M. Muse, county attorney, Lillington.

Louisville, Ky.—Church.—It is reported that St. Paul's German Evangelical Church is considering the erection of edifice to cost \$41,000.

Maxton, N. C.—Church.—H. E. Bonitz, Wilmington, N. C. prepared the plans for edifice previously reported to be erected by St. Paul M. E. Church, South: to be 76x80 feet, of cement stone throughout covered with slate, equipped with hot-air furnace and electric lights: cost \$800. A parsonage constructed of the same material will also be erected: Euclid McWhorter, pastor and chairman of building committee.\*

Memphis, Tenn.—Dwellings.—The Mississippi Bond & Investment Co. has increased capital stock from \$25,000 to \$500,000. It is proposed to expend \$200,000 in the construction of six-room frame dwellings in the Montgomery Park addition.

Memphis, Tenn.—Store and Flat Building.—John Aste is having plans prepared by Chighizola, Hunker & Cairns for the erection of a two-story brick store and flat building: cost \$13,000.

Memphis, Tenn.—Dwelling.—C. J. Wagner is having plans prepared by Chighizola, Hunker & Cairns for four residences to be erected at a cost of \$6000 each.

Memphis, Tenn.—Dwelling.—T. McKeon is having plans prepared by Chighizola, Hunker & Cairns for a residence; to be of brick veneered residence with slate roof, and cost \$7000.

Memphis, Tenn.—Dwelling.—Bayard Snowden is having plans prepared by Chighizola, Hunker & Cairns for a brick-veneered residence with slate roof, to cost \$6200.

Memphis, Tenn.—Dwelling.—Chighizola, Hunker & Cairns are preparing plans for a brick-veneered residence with tile roof, to be erected by Frank F. Hill at a cost of \$35,000.

Memphis, Tenn.—Dwellings.—Chighizola, Hunker & Cairns are preparing plans for a residence to be erected by Bayard Cairns at a cost of \$740. The same architects are preparing plans for a residence to be erected by William H. Hanler at a cost of \$740.

Memphis, Tenn.—Dwellings.—Chighizola, Hunker & Cairns have prepared plans for a residence with slate roof, to cost \$7500; also for a residence to be erected by James Canale of brick veneer with tile roof and costing \$9000.

Monroe, Ga.—Church.—The Methodist congregation is arranging for the erection of \$10,000 residence. Address The Pastor. \*

Milledgeville, Ga.—Reformatory Building.—Bids will be asked at once for the erection of two-story brick building 50x100 feet for the State Reformatory, for which A. C. Bruce, English-American Building, Atlanta, Ga., was reported last month as preparing plans.

Minden, La.—City Hall, Jail, etc.—The erection of a \$75,000 city hall and \$50,000 jail building is being considered. Address Mayor Forsythe.

Montgomery, Ala.—Association Building.—Bids will be received until December 8 for the erection of a four-story brick building for the Y. M. C. A.; plans and specifications on file at office of Frank Lockwood, architect. Usual rights reserved.

Morristown, Tenn.—Business Block.—John Loop & Co. are arranging for the erection of business block.

Nashville, Tenn.—Office Building.—J. P.

Fulcher, S. G. Wade and L. W. Denny have purchased site on which to erect an office building.

Natchitoches, La.—Postoffice.—James Knox Taylor, supervising architect, Treasury Department, Washington, D. C., will open bids January 4, 1906, for the construction complete of the United States postoffice in accordance with drawings and specifications, copies of which may be had on application to supervising architect or at the office of postmaster, Natchitoches, La., at the discretion of the supervising architect.

New Orleans, La.—Office Building.—Henry Denis and associates have purchased site on which it is stated a six-story office and building will be erected.

New Orleans, La.—Store Building.—Charles A. Kaufman Company, Ltd., is completing arrangements for the erection of proposed store building: to be six stories, 200x190 feet, constructed of steel, concrete and stone.

New Orleans, La.—Store Building.—It is reported that D. Bernhardt will erect six-story building, replacing structure recently burned.

Oklahoma City, Ok. T.—Stable.—Holland & Squires, Topeka, Kan., are preparing plans for a brick stable previously reported to be erected by Wells, Fargo & Co.; D. T. Mervine, superintendent, Kansas City, Mo. Electric lights will be installed.

Oklahoma City, Ok. T.—Flat Building.—Curry & Branson is having plans prepared by J. A. Boonstra, Lafayette, Ind., for the erection of a three-story flat building, 62x68 feet, of press brick and stone, composition roof, electric lights, etc.; cost \$15,000.

Palestine, Texas—School Building.—City has voted the proposed \$20,000 bond issue for school purposes. Address The Mayor.

Pembroke, Ky.—Warehouse.—The Pembroke Warehouse Co., reported incorporated last month with \$10,000 capital stock to erect warehouse, has let contract to T. J. Hawkins, Guthrie, Ky., for the erection of building 80x300 feet of frame and brick; cost \$11,000. Electric fixtures and freight elevator will be installed.\*

Pensacola, Fla.—Dwelling.—Bruce & Everett, Atlanta, Ga., have completed plans for a \$35,000 residence to be erected; the building to be equipped with the most modern improvements in electrical and gas illumination, steam heating, plumbing, etc.

Petersburg, Va.—Hotel.—A stock company is being organized for the erection of a hotel, and H. P. Stratton is chairman of the committee.

Pine Bluff, Ark.—Church.—The Lakeside Methodist congregation contemplates the erection of a brick edifice to cost \$25,000: W. C. Watson, pastor.

Pine Bluff, Ark.—Church.—E. N. Armit of Little Rock, Ark., has contract to erect \$15,000 edifice for the Second Baptist Church, for which R. H. Hunt, Chattanooga, Tenn., was previously reported as preparing plans.

Rhems, S. C.—Warehouse.—W. H. Curry is reported as contemplating the organization of stock company to erect cotton warehouse.

Roanoke, Va.—Fire Station.—City will vote on the issuance of \$25,000 of bonds for the erection of fire station and the purchase of fire engine. Address The Mayor.

Rockingham, N. C.—Opera-house.—R. L. Steel has had plans prepared by H. E. Bonitz, Wilmington, N. C., for proposed opera-house: to be one story, of frame and brick, metal partitions and cornices, equipped with electric lights, and cost \$6000.

San Antonio, Texas—Apartment-house.—Dr. William Thompson of Little Rock, Ark., will erect a two-story artificial-stone apartment-house 60x150 feet.

Savannah, Ga.—Dwelling.—J. R. Eason & Son have contract to erect frame residence for W. S. Gardner after plans by H. W. Witter.

San Marcos, Texas—School Building.—City has voted the \$8000 bond issue recently reported for the erection of school building: J. R. Porter, mayor.

South McAlester, I. T.—Building.—Bids will be received until January 15 at the office of Wm. Bushy, 33d, chairman, South McAlester, I. T., for all of the labor and material required to complete the building for the Indian Consistory above the foundation. Proposals are also desired upon the building complete, including all wiring, heating, plumbing, and excepting only organ. Proposals will also be considered for the general contract alone and separately for plumbing, heating and wiring. Certified check for 5 per cent. of amount of bid must accompany each proposal. Plans may be seen at the office of chairman, also at the office of Chas. L. Thompson, architect, III Fulk Building, Little Rock, Ark. Usual rights reserved.

Spotsylvania, Va.—Hotel.—E. W. Kinsey,

Hicks Store, Va., has contract to erect hotel for Lee J. Graves, referred to recently; to be two stories, of frame, and cost \$5000.

Stillwater, O. T.—College Building.—A. O. Campbell has contract for the erection of proposed building at the A. & M. College, for which \$90,000 was appropriated by the last legislature.

St. Louis, Mo.—Association Building.—Plans are being prepared by Theo. C. Link, Carlton Building, for Y. M. C. A. building, to be erected at a cost of \$150,000, for railroad employees.

St. Louis, Mo.—Store Building.—Eames & Young have completed plans for Werner & Werner's proposed building; to be four stories, of fireproof steel construction, 56x101 feet; the interior to be finished in hardwood and marble and cost about \$200,000.

Tifton, Ga.—School Building.—City has voted affirmatively the \$20,000 bond issue previously mentioned for the purchase of site and erection of school building. Address The Mayor.

Tulsa, I. T.—Opera-house.—Tulsa Opera House Co. is the title of company reported incorporated last week with C. L. Reeder, president, to erect opera-house. A three-story building 60x140 feet, of fireproof construction, will be erected, for which contract has been let to George Penn after plans by George S. Johnson. Steam heat, electric lights and elevator will be installed; cost \$45,000.

Vicksburg, Miss.—Business Building.—Philip H. Field is having plans prepared by Architect Donovan for a two-story pressed brick building 53x33 feet, of fireproof construction, steel front, metal ceiling; the first floor to have concrete flooring and wire-glass skylights. Electric lights will be installed. The building will contain 1500 square feet of glass surface and 3000 square feet of floor space.

Victoria, Texas—Business Building.—A. R. Cox has contract to erect a brick addition to the Schadwitz Building.

Washington, D. C.—Dwelling.—A. O. von Herbulis has prepared plans for residence to be erected for the Most Rev. Diomedes Faliconio, archbishop of Larissa; to be three stories, 61x90 feet, of stone, entirely fireproof. A marble staircase will lead from the first to the second floor, and the dining-room will have a paneled oak ceiling, oak wainscoting, etc. About \$100,000 will be expended.

Washington, D. C.—Store and Apartment-house.—W. E. Swann is having plans prepared by C. Edgar Webb for a two-story store and apartment-house to cost \$7800.

Washington, D. C.—Apartment-house.—L. A. Roberts is having plans prepared by C. Edgar Webb for a two-story apartment-house to cost \$6300.

Washington, D. C.—Apartment-house.—C. Edgar Webb has prepared plans for a three-story apartment-house to be erected by Chas. W. Newhouse at a cost of \$14,000.

Washington, D. C.—Apartment-house.—M. L. Weller has had plans prepared by C. Edgar Webb for the erection of a two-story apartment-house to cost \$5000.

Washington, D. C.—Office Building.—Bids will be received until November 25 at the office of Elliott Woods, superintendent U. S. Capitol Building and Grounds, Washington, D. C., for the laying of all rough brickwork incident to the construction of the office building, U. S. Senate. Certified check for \$3000 must accompany each bid. Plans and specifications may be had on application. Usual rights reserved.

Washington, D. C.—Dwelling.—F. L. Hoover is arranging for the erection of proposed \$35,000 residence.

Washington, D. C.—Apartment-house.—J. D. Burns has purchased site on which to erect a three-story apartment-house.

Washington, D. C.—Store and Dwelling.—C. E. Webb has prepared plans for a two-story store and dwelling to be erected at Congress Heights by Hall & Bradley.

West Palm Beach, Fla.—College Building.—Bruce & Everett, Atlanta, Ga., have prepared plans for a college building to be erected at a cost of \$30,000; to be two stories, of brick, cement and stone, tile roof.

Wheeling, W. Va.—Business Block.—Henry Schmidlach is having plans prepared by Gieseley & Faris for a two-story business block; the lower floor to be divided into five storerooms each 20x70 feet; the upper story to be used as auditorium.

Winston-Salem, N. C.—Public Building.—It is reported that the Consolidated Construction Co. of New York, N. Y., has contract at \$47,000 for the erection of proposed public building.

Winston-Salem, N. C.—Store and Office Building.—Thomas Tise has contract to erect

a four-story store and office building 27x491 feet of pressed brick with stone and terra-cotta trimmings.

## RAILROAD CONSTRUCTION.

### Railways.

Anderson, S. C.—The Anderson Traction Co. is to meet on December 5 to consider plans to build its proposed line of interurban electric railway from Anderson via Belton, Williamston and Pelzer to Greenville, S. C.

Atlanta, Ga.—Reported that surveys are being made for a railroad on behalf of the Collins Mountain Granite Co., 51 North Pryor street, Atlanta. The line will leave the Georgia Railroad at a point 26 miles from Atlanta. Ransom Rogers, Empire Building, Atlanta, is chief engineer. Thomas J. Wesley is secretary and treasurer, and W. J. Davis is also interested.

Augusta, Ga.—Liberal subscriptions to the bonds of the Augusta & Elberton Railway to build the proposed line from Wheless to Little River, 15 miles, are reported. J. R. Hogan of Augusta, C. L. Groves of Lincolnton and others are interested.

Austin, Texas.—A. J. Ellers, president of the Business League, is reported to be working on a plan for an electric railway from Austin to Lockhart.

Baltimore, Md.—An officer of the Baltimore & Ohio Railroad Co. informs the Manufacturers' Record that there is nothing in the press report that the company is arranging to build a line from Clarksburg, W. Va., to Belington, W. Va., to be known as the Elk River Railroad.

Baltimore, Md.—Concerning the report that the Baltimore & Ohio Railroad would build a branch from the Fairmont, Morgantown & Pittsburgh line in West Virginia to Gaston Junction, an officer of the company informs the Manufacturers' Record that thus far there have been no developments respecting it.

Birmingham, Ala.—President Frank H. Lathrop of the Lathrop-Hatten Lumber Co. informs the Manufacturers' Record that the Lathrop-Hatten Railway will begin at Reidsville within the next 30 days on its five-mile extension south of Pell City and parallel with the Coosa river in St. Clair county.

Bristol, Va.—Reported that the South & Western Railway, which is now being extended from Spruce Pine, N. C., to Marion, N. C., will rebuild its present line between Johnson City, Tenn., and Spruce Pine, which will involve a great deal of new construction. M. J. Caples is general manager and chief engineer.

Bunkie, La.—Reported that J. W. Dickinson has been given the contract to grade the first 10 miles of the Louisiana East & West Railroad.

Chicago, Ill.—Mr. W. J. Harahan, fourth vice-president of the Illinois Central Railroad, is reported as saying that, to make its Birmingham connection, 75 miles will have to be built from near Corinth, Miss., to Hattiesburg, Ala. From the latter point to Birmingham the tracks of the Northern Alabama Railroad and of the Frisco system will be used. The company is applying for franchises in Birmingham. A. S. Baldwin is chief engineer.

Conway, S. C.—Mr. Robert B. Scarborough writes the Manufacturers' Record that the Eddy Lake & Northern Railroad, lately incorporated, will develop timber lands of the Eddy Lake Cypress Company, but it will also be operated as a common carrier. Marion, S. C., the proposed terminus of the line, is 35 or 40 miles from Eddy Lake.

Dallas, Texas.—The West Texas Northern Railway Co. has filed its charter to build a line from Kerrville to Amarillo, Texas, 450 miles. The incorporators are E. P. Spears, J. T. Pinson, J. W. Pierson, John T. Witt, H. D. Caston, J. A. Wilhite, all of Dallas; W. H. Edwards, W. R. Cole, G. L. Brown, S. H. Morrison, all of Big Springs. Mr. Spears is president, and Mr. Edwards, secretary; headquarters at Big Springs, Texas. Mr. Spears is reported as saying that construction will begin about December 1.

Earles, Ky.—Mr. G. B. Hengen, president of the Kentucky Midland Railroad Co., 655-656 Monadnock Block, Chicago, and 15 William street, New York, writes the Manufacturers' Record that the line will be 27 miles long from Madisonville, Ky., to Central City, Ky., with a three-mile branch to the Midland Coal Co.'s mines. Line will be standard gauge; right of way 100 feet wide. The other directors are Vice-President Henry D. Laughlin, Secretary-Treasurer Robert W. Dunlop, J. B. Stille and K. C. Hengen. The chief engineer is M. M. Wheeler of Earles, Ky. The company will do its own construction. It is expected to begin work within 30 days.

Mobile, Ala.—Mr. T. F. Whittelsey, vice-president and general manager of the Mobile, Jackson & Kansas City Railroad, who is president and also one of the incorporators of the North Carolina Connecting Railway

Fort Morgan, Ala.—Three miles are reported built north from Fort Morgan on the Bay Minette & Fort Morgan Railroad to connect with the northern portion of that line at Foleyton.

Greenville, S. C.—The route of the proposed Greenville & Knoxville Railroad has been inspected by G. D. Howell and J. R. Bowie of Philadelphia, the former a contractor and the latter a capitalist. H. H. Prince and others of Greenville are interested.

Henryetta, I. T.—W. P. Dewar, vice-president of the Missouri, Oklahoma & Gulf Railway, is reported as saying that construction from Henryetta to Shawnee will begin within two months. Wm. Kenefick is president, and Frank C. Taylor, secretary.

Hopkinsville, Ky.—President W. G. Harris of the Dawson Springs & Madisonville Railway (proposed) is reported as saying that the American Engineering Co. of Indianapolis has the contract for the survey. Work is to begin this winter. Line will be 20 miles long and operated by both steam and electricity.

Houston, Texas.—Reported that the Houston & Texas Central Railway will build a branch from Mexia to Fairfield, Texas. L. A. Cottingham is engineer maintenance of way at Houston.

Houston, Texas.—Reported that the company has been reorganized, and actual work will soon begin on the proposed Houston & Galveston Interurban Railway. J. O. Ross is now president; H. C. House, vice-president; J. C. Rice, treasurer; F. L. Dana, secretary; William E. Scott, land commissioner, and O. T. Polk, attorney. Other directors are Harris Masterson and Hyman Levy of Houston and W. J. Moore of San Antonio. Connections to Seabrook and La Porte are projected.

Kansas City, Mo.—A press report from New York says that the Kansas City Southern Railroad will build an extension to New Orleans. A. F. Rust is engineer at Kansas City. President J. A. Edson is quoted as saying that while a New Orleans extension is under consideration, it may be necessary only to reach New Orleans.

Kansas City, Mo.—Reported that the Iowa & St. Louis Railroad will next year extend its line from Mercerville via Mexico, Mo., to St. Louis. W. G. Brimson is general manager at Kansas City.

Knoxville, Tenn.—The Knoxville, Sevierville & Newport Railway Co. has been chartered to build a line from Knoxville via Rockford and Sevierville to Newport, Tenn., about 50 miles. The incorporators are S. P. Condon, John B. Brabson, B. D. Brabson, Pryor Brown and Jerome Templeton.

Knoxville, Tenn.—Reported that application will be made for a charter to build an interurban electric railway between Knoxville and Maryville, Tenn., 16 miles. Those interested are Joseph Burger of Maryville, and J. P. Gaut, Robert Vestal, Howard Corruck, J. Cal. Sterchl, Dr. W. S. Nash and others of Knoxville.

Lehigh, I. T.—The Oklahoma Central Railroad is reported to have let contracts for line to Chickasha as follows: Walls, Hale & Co., to grade the first 11 miles out of Lehigh; E. N. Taylor, Atoka, I. T., 400,000 ties and pilings; A. B. McKinley, bridges and timber for the first three miles; M. B. Ryan of Shawnee, O. T., bridges, trestles and culverts; Wisconsin Bridge & Iron Co. of Chicago, steel bridge 86 feet long over Leader creek; construction in charge of W. J. Tarry, Ada, I. T.

Live Oak, Fla.—L. T. Morgan of Live Oak and C. W. Bache, engineer, are reported to be working 100 men on the branch of the Live Oak, Perry & Gulf Railway to Mayo, Fla.

Live Oak, Fla.—W. H. Ellis is reported to be building the Fernandina extension of the Florida Railway, formerly the Suwanee & San Pedro.

Louisville, Ky.—Reported that the Louisville & Nashville Railroad will extend the North Alabama line to Tuscaloosa, Ala. W. H. Courtenay is chief engineer at Louisville.

Marion Station, Miss.—Dr. R. H. Harman of Marion Station is reported to be interested in a plan to build an electric railway from Marion to Meridian, about five miles.

Macdonald, W. Va.—T. J. Swift & Co. are reported to have the tracklaying contract for the Piney River & Paint Creek Railroad, and it is expected will have five miles of steel laid within a month. S. Dixon of the Macdonald Colliery Co. and others are the incorporators.

Mobile, Ala.—Mr. T. F. Whittelsey, vice-president and general manager of the Mobile, Jackson & Kansas City Railroad, who is president and also one of the incorporators of the North Carolina Connecting Railway

Co., lately chartered to build from Spring Hope, N. C., to Roxboro, N. C., writes the Manufacturers' Record that the line will be about 90 miles long and that part of the right of way and roadbed of the Old Roanoke Valley Railroad between Manson, N. C., and Soudan, Va., which is owned by the company, will doubtless be used. The names and addresses of the other officers are as follows: D. J. Nysewander, first vice-president, Homeville, Va.; D. W. Gunn, second vice-president, Roanoke, Va.; S. P. Douglas, secretary and auditor; R. H. Hood, treasurer, and W. H. Hood, director, all of Henderson, N. C.

Nashville, Tenn.—J. H. Connor, president of the proposed Nashville & Huntsville Railroad, is reported as saying that construction will begin within 30 days at Huntsville, Ala.

New Orleans, La.—Mr. E. B. Cushing, general superintendent of Morgan's Louisiana & Texas Railroad and also of the Louisiana Western Railroad, writes the Manufacturers' Record that construction will probably begin early next year on the authorized line from Lafayette, La., to the Mississippi river opposite Baton Rouge, La., about 52 miles. Other contemplated extensions are as follows: The Arnaudville branch to Port Barre, the Lockport branch to Cut-Off, the Eunice branch to Bayou Cocodrie, and a line north from Lake Charles.

New Orleans, La.—The New Orleans & Northeastern Railway will, it is reported, double-track its line for 20 miles from New Orleans to Lake Pontchartrain. C. C. Harvey is president and general manager at New Orleans.

Norfolk, Va.—The line of the Tidewater Railway now under construction is from Sewell's Point via Suffolk and Jarrett to Brookneal. It will be continued from the latter point via Roanoke and Glenlyn to a connection with the Deepwater Railway in West Virginia. The contractors now at work are the McArthur Bros. Company, A. & C. Wright, the Bates & Rogers Construction Co. and Sands & Oliver.

Norfolk, Va.—C. L. Chadbourne of New York, general counsel of the Virginia & Carolina Coast Railway Co., is reported as saying

that contracts have been let for much of the work of the proposed line and that work is progressing.

The road will run from Norfolk to Beaufort, N. C., with branches, and will require the construction of about 200 miles of track.

Oklahoma, City, O. T.—Survey is reported begun on the proposed Oklahoma & Texas Railway, which is to run from Oklahoma City to Wichita Falls, Texas. P. H. McCrickett is engineer.

Oklahoma City, O. T.—The Pueblo, Oklahoma City & New Orleans Railway, lately chartered with \$3,000,000 capital, will be about 1050 miles long from Pueblo, Col., via Woodward and Fort Supply, Okla., to Oklahoma City, and thence to New Orleans. Survey will shortly begin. The incorporators are J. H. Wheeler, W. C. Burke, G. H. Dodson, R. T. Woodbridge and John H. Wright, all of Oklahoma City. The line is said to be financed from Oklahoma City to Fort Supply, 150 miles, and actual construction is expected to begin before January 1.

Oklahoma City, O. T.—At the annual meeting of the Oklahoma City & Texas Railway Co. an appropriation was made for the final survey. The directors are G. B. Stone, president, Oklahoma City; H. W. Prouty, vice-president; Eugene Willoughby, secretary-treasurer, both of Chicago; W. W. Bierce of Oklahoma City and H. R. Nickerson of New York city. Mr. Willoughby is a Chicago financier. Mr. Prouty is an attorney, Mr. Nickerson is a vice-president of the Mexican Central Railway, Mr. Bierce is an experienced railroad builder and Mr. Stone is a real estate man. President Stone is reported as saying that as soon as surveys are finished construction will begin.

Pauls Valley, I. T.—The Pauls Valley Railway Co. is reported to have located 30 miles of line. The road will be 180 miles long from Ada, I. T., via Pauls Valley, I. T., to Wichita Falls, Texas. Expected to let contract before January for 10 miles. J. C. Amendt is president, and Albert Rennie is secretary, both at Pauls Valley. M. P. Paret at Kansas City, Mo., is chief engineer.

Portsmouth, Va.—A director of the Norfolk, Portsmouth & Newport News Railway is reported as saying that the company is grading from the western branch, which is being bridged, toward Churchland. Line is already in operation to Rodman Heights or Battery Park on the branch, and much of the bridge is built.

Raleigh, N. C.—President C. O. Haines of the Raleigh & Pamlico Sound Railway is reported as saying that grading is complete for 12 miles out of Raleigh and that five miles

of track are laid. Survey is complete from Raleigh to Washington, N. C., 115 miles, and is now in progress from Washington to Newbern, 35 miles.

Richmond, Va.—Bids will be received until December 1 for construction on the Richmond & Chesapeake Bay Railway. C. P. E. Burgwyn is chief engineer, at 519 Mutual Building.

Richmond, Va.—Construction is reported begun on the Richmond & Chesapeake Bay Electric Railway by Phillips & Alport, contractors.

Richmond, Va.—R. V. Hillards and H. Chester Johnson of Philadelphia, George W. Carhart of New York and others are reported to have bought the unfinished Richmond & Tide-water Railway, and will build a line to be known as the Richmond, Rappahannock & Eastern Railway. Mr. Hillards, who is president of the Hillards-Gillison Company of Philadelphia, is president of the railroad company; Mr. Carhart is vice-president and general manager; R. L. Morgan, treasurer; B. F. White, secretary; Bonsal Taylor and Mr. Johnson are attorneys; capital \$1,200,000; expected to start work at Ellerson about December 15.

Shreveport, La.—The Louisiana Railway & Navigation Co. has completed its extension from Baton Rouge to Gonzales, La., about 25 miles south, and it is expected to have it completed for 45 miles south of Baton Rouge by January 1 and to New Orleans by July next.

St. Louis, Mo.—Mr. S. B. Fisher, chief engineer of the Missouri, Kansas & Texas Railway, sends the Manufacturers' Record a denial of the press report that the company will build an extension from Oklahoma City to Denver, Col.

Topeka, Kan.—Mr. W. B. Storey, Jr., chief engineer of the Atchison, Topeka & Santa Fe Railway Co., informs the Manufacturers' Record that it is not condemning a right of way from Tulsa to Shawnee, but for a piece of land north of Tulsa required for the line now practically completed between Owasso and Tulsa.

Trinity, Texas.—The Beaumont & Great Northern Railroad, which is being built by William Carlisle of Topeka, Kan., and others, has, it is reported, laid three miles of track from Trinity eastward and will have seven miles completed eastward by November 20. It is expected to have the line in operation to Onalaska, 20 miles from Trinity, by May 1 next. From Onalaska to Livingston, the terminus of the line, 16 miles, will be some heavy work. This information is credited to H. E. Farrell, a director in the company.

Troy, Ala.—The Pea River Valley & Gulf Railroad Co. has been incorporated to build a line from Opelika, Ala., to Portland, Fla., about 200 miles. W. H. Booth is president; J. V. Huff, vice-president, and D. A. Baker, general manager. The line may run via Hartsboro, Geneva, Troy, Union Springs, Enterprise or Elba and De Funik Springs.

Vinegar Bend, Ala.—The Alabama & Mississippi Railroad Co. informs the Manufacturers' Record that it proposes to build 15 miles of line in Greene county, Mississippi.

Vinita, I. T.—The Vinita & Western Railroad Co. is reported to be rapidly pushing construction. Grading is finished for several miles out of Vinita, and it is expected that the line will soon be in operation to the Timber Hill coal bank, west of Blue Jacket, I. T. The line is to run to Coffeyville and Cherryvale, Kan.

Washington, D. C.—McMillan & McDermott are reported to have the contract for building an embankment three-quarters of a mile long and 11 feet high for the improvement of the Washington, Alexandria & Mt. Vernon Electric Railway. The line will be double track. Altogether the company will spend about \$500,000 for improvements.

#### Street Railways.

Alexandria, La.—Tracklaying has begun on the Alexandria Street Railway.

Atlanta, Ga.—The Georgia Railway & Electric Co. has applied for a franchise to build an extension, double track, from Oakland City through to College Park, one and one-half miles.

Baltimore, Md.—The Loudon Park Cemetery Co. has put in operation its private line of electric railway, about a mile long, and will extend it as required. Frank Primo is secretary.

Bristol, Tenn.—The Interstate Street Railway Co. of Bristol has been incorporated in Virginia by H. Morrison, president, Richmond, Va.; D. M. Bernard, secretary and treasurer, Bristol.

Fort Gibson, I. T.—Reported that the Fort Gibson Light & Power Co. will build a railway from Fort Gibson to Muskogee, I. T.

Hampton, Va.—The Hampton Roads Trac-

tion Co. has been incorporated by Horace A. Doan of Philadelphia—who recently purchased the Hampton Roads Railway & Electric Co.—and others. The company has the line from Newport News to Old Point Comfort. The officers are Horace A. Doan, president, Philadelphia; Walter Holliday, treasurer and vice-president; W. D. Browning, secretary, both of Richmond, Va.; capital \$500,000.

Montgomery, Ala.—Mr. R. D. Apperson of Lynchburg, Va., president of the Montgomery Traction Co., is quoted as saying that the company has under consideration the plan to build an extension to Wetumpka, Ala.

Montgomery, Ala.—The purchase of the Montgomery Street Railway, 26 miles long, by the Montgomery Traction Co. is reported. Improvements will, it is said, be made. R. D. Apperson is president and W. H. Ragland is general manager of the traction company.

Van Buren, Ark.—The transfer of the Van Buren Electric Light & Power plant to the Fort Smith-Van Buren Bridge & Traction Co., it is said, assures the building of an electric railway to connect the two towns.

Wheeling, W. Va.—The Wheeling Traction Co. proposes to build an extension of the "Fair Ground Loop," and has applied for a franchise.

Wheeling, W. Va.—Dixon & Pickett are reported to have the contract for grading for the new second track of the Wheeling Traction Co. along Kentucky Heights.

#### MACHINERY, PROPOSALS AND SUPPLIES WANTED.

**Manufacturers and others in need of machinery of any kind are requested to consult our advertising columns, and if they cannot find just what they wish, if they will send us particulars as to the kind of machinery needed we will make their wants known free of cost, and in this way secure the attention of machinery manufacturers throughout the country. The Manufacturers' Record has received during the week the following particulars as to machinery that is wanted.**

Air Compressors.—Justin Matthews, Occidental Building, Little Rock, Ark., wants addresses of manufacturers of belt-driven air compressors.

Air Compressor.—The Hub Machine & Tool Co., 116 South 6th street, Philadelphia, Pa., is in the market for one air compressor about 200 feet capacity.

Art Glass.—See "Church Furniture."

Asphaltum, etc.—Frank Wright, Cave Springs, Ga., wants prices from manufacturers on asphaltum and tar in barrel lots.

Belting.—Justin Matthews, Occidental Building, Little Rock, Ark., wants addresses of manufacturers of stitched-cloth belting.

Boiler.—Columbus Coca-Cola Bottling Co., Columbus, Ga., wants price on one 75-horse-power boiler complete f. o. b. Columbus.

Boiler.—See "Engine and Boiler."

Boiler.—See "Engine and Boiler."

Boiler.—See "Engines and Boilers."

Boiler.—O. R. Whitney, 39-41 Cortlandt street, New York, N. Y., wants one 60-horse-power second-hand locomotive boiler complete with all fittings, good for 100 pounds steam. (See "Engine and Boiler.")

Boilers.—Ocean City Development Co., John W. Woodland, president, 211 North Liberty street, Baltimore, Md., wants prices on boilers.

Boilers.—The Macon Railway & Light Co., Macon, Ga., is receiving bids on a battery of boilers sufficient to generate steam for 2000 horse-power. (See "Engine and Boilers.")

Boilers.—See "Water-works, etc."

Bolt, Nut and Screw Machinery.—E. C. Horton, 107 Ivory street, Atlanta, Ga., wants addresses of manufacturers of machinery for making bolts, nuts and screws.

Bottles.—Empire Manufacturing Co., Prague, O. T., wants prices from manufacturers on glass bottles.

Bridgework.—Bids will be received until November 21 for repairing bridges in St. Charles county, Missouri, recently damaged, for which \$1500 is available. Address Alfred Riske, county bridge commissioner, St. Charles, Mo.

Bronze and Copper Work.—Mrs. Rufus Fan, Anderson, S. C., wants addresses of manufacturers or makers of bronze and copper busts.

Building Materials.—John B. Carlisle &

Co., Lebanon, Ky., wants estimates on building material, especially on one steel girder 38 feet 6 inches long, composed of two 24-inch 50-pound steel I beams with a steel one-half-inch top and bottom plate riveted to same, with bolts and separators, and one steel girder 16 feet long composed of two 12-inch 31½-pound steel I beams with bolts and separators.

Building Materials.—Rev. Euclid McWhorter, chairman building committee St. Paul M. E. Church, South, Maxton, N. C., wants prices on rolling partitions.

Building Materials.—The Masonic Trust Association, Bluefield, W. Va., wants prices on building materials and equipment for a fireproof office building.

Building Materials.—Edgefield Baptist Church, Nashville, Tenn., will want prices on building materials and equipment for church building to be erected at a cost of \$30,000; Wheeler, Runge & Dickey, Charlotte, N. C., architects.

Calendars.—Lundy-Pettis Company, 611 11th street, N. W., Washington, D. C., will be in the market for 500 calendars for 1906.

Cannery Equipment.—A. D. Hughes, Johnson City, Tenn., will be in the market for machinery and equipment for canning factory.

Church Furniture.—Rev. Euclid McWhorter, chairman building committee St. Paul M. E. Church, South, Maxton, N. C., wants prices on art glass windows, seats for church, etc.

Concrete Work.—Bids are being received for concrete work in levee district No. 1, Faulkner county, Arkansas, estimated from \$2500 to \$4000. For particulars address J. E. Little, president board, Conway, Ark.

Cotton-rope Machinery.—James W. Baker, Kymulga, Ala., is in the market for machinery for making cotton rope.

Culinary Equipment.—S. Isaacs, Atlanta, Ga., will shortly be in the market for a complete steam-cooking appliance.

Cupola Blower.—The Hub Machine & Tool Co., 116 South 6th street, Philadelphia, Pa., is in the market for one cupola blower, size No. 9 (Starkevant).

Dam Work.—Bids will be received until December 12 at United States engineer office, Wheeling, W. Va., for building dam No. 13, Ohio river, about six miles below Wheeling; information furnished on application; Geo. A. Zinn, major, engineers.

Distilling Apparatus.—See "Wood By-products Machinery."

Drop Hammers.—The Hub Machine & Tool Co., 116 South 6th street, Philadelphia, Pa., is in the market for two 50-pound drop hammers.

Drying Equipment.—American Lekile Co., 609 13th street, Washington, D. C., wants prices on equipment for baking and drying metal tiling.

Electrical Equipment.—The municipal Board of Awards of Baltimore, Md., will receive proposals at the office of Harry F. Hooper, city register, City Hall, until November 22 for installing a booster and apparatus in city courthouse. Specifications may be obtained from the office of Edward D. Preston, inspector of buildings, City Hall.

Electrical Equipment.—Big Sandy Crate Manufacturing Co., Big Sandy, Texas, is in the market for a 100-light dynamo.

Electrical Equipment.—See "Pump."

Electrical Equipment.—See "Power Plant."

Electrical Supplies.—Bids will be received until November 20 at the depot quartermaster's office, 39 Whitehall street, New York, for furnishing and delivering f. o. b. factory 55,000 incandescent electric lamps, more or less. Specifications, blanks for proposals and full information furnished on application; G. S. Bingham, major and quartermaster, U. S. A. depo: Q. M.

Electric Fixtures.—Rev. Euclid McWhorter, chairman building committee St. Paul M. E. Church, South, Maxton, N. C., wants prices on electric fixtures.

Electric-light Plant.—Mrs. L. E. Bobo, Lyon, Miss., wants addresses of firms dealing in equipment for electric-light plant.

Electric-light Plant.—See "Water-works, etc."

Elevator.—Golden Rule Manufacturing Co., Pensboro, W. Va., is in the market for an elevator.

Elevator.—Proposals endorsed "Proposals for Electric Elevators" will be received until December 9 at the bureau of yards and docks, Navy Department, Washington, D. C., for an electric freight elevator in storehouse for torpedo-boat outfit at the United States navy-yard, Norfolk, Va. Plans and specifications can be seen at the bureau, or will be furnished by the commandant of the navy-

yard named; Mordecai T. Endicott, chief of bureau.

Elevators.—J. H. & J. W. Draughon, 404 Memphis Trust Building, Memphis, Tenn., wants prices on electric elevators.

Elevators.—Pembroke Warehouse Co., Pembroke, Ky., wants prices on freight elevators.

Engine.—Sherwood Bobbin & Manufacturing Co., Greensboro, N. C., wants prices on 100-horse-power engine (Corliss preferred).

Engine.—Frank Wright, Cave Springs, Ga., wants to buy a new or good second-hand 25-horse-power engine; the new oil-operating or gasoline preferred.

Engine.—Electrical Engineering Co., 710 Missouri Trust Building, St. Louis, Mo., is in the market for a six-horse-power gasoline engine suitable for a new type of automobile.

Engine.—Lee J. Grave, Spotsylvania, Va., is in the market for an engine. (See "Water Supplies.")

Engine and Boiler.—Empire Manufacturing Co., Prague, O. T., wants prices on six or eight-horse-power engine and boiler.

Engine and Boiler.—Worth-Sherwood Shuttleblock Co., Greensboro, N. C., is in the market for three 15-horse-power engines and boiler; portable.

Engine and Boiler.—R. H. Martin, Maplesville, Ala., is in the market for a 40 or 50-horse power engine and boiler; second-hand in good condition preferred.

Engine and Boiler.—O. R. Whitney, 39-41 Cortlandt street, New York, N. Y., wants one 25-horse-power center-crank slide-valve engine and one 60-horse power locomotive boiler complete with all fittings, good for 100 pounds steam; second-hand in good condition.

Engine and Boilers.—The Macon Railway & Light Co., Macon, Ga., is receiving bids on engine and entire steam-plant equipment and battery of boilers sufficient to generate steam for 2000 horse-power.

Engineering Machinery.—Jos. M. Roman & Co., 136 Liberty street, New York, want catalogues and price-lists of machinery used in engineering water-power development, transmission and application, for their Southern office.

Engines.—See "Water-works, etc."

Engines and Boilers.—See "Power Plant."

Exhaust Apparatus.—Carpenter, Taylor & Co., Rutherfordton, N. C., want to purchase new or second-hand 40-inch exhaust fan for planing mill. State lowest cash price.

Foundry Equipment.—See "Machine Tools."

Furniture-factory Equipment.—R. B. Hall, Greenville, Tenn., will be in the market for machinery and equipment for furniture factory.

Furniture Machinery.—Albino Valencia, Calle 384, Antofagasta, Chile, manufacturer of furniture and fancy articles, wants to correspond with manufacturers of machinery for making furniture.

Hame-factory Equipment.—George F. Newman, secretary Chamber of Commerce, Greensboro, N. C., wants addresses of manufacturers of hame machinery; also of iron fixtures for hames.

Heating Apparatus.—Rev. Euclid McWhorter, chairman building committee St. Paul M. E. Church, South, Maxton, N. C., wants prices on furnaces.

Heating Apparatus.—J. H. & J. W. Draughon, 404 Memphis Trust Building, Memphis, Tenn., wants prices on heating apparatus. (See "Power Plant.")

Heating Apparatus.—The Fraternal Building Association, Dr. H. M. Cannon, chairman building committee, Butler, Mo., wants prices on heating apparatus.

Heating Apparatus.—Chas. C. Ensminger, 3 Blum Building, Jacksonville, Fla., wants estimates on steam-heating plant with radiators and piping.

Holsting Equipment.—Pembroke Warehouse Co., Pembroke, Ky., wants prices on derricks.

Horseshoe Machinery.—E. C. Horton, 107 Ivory street, Atlanta, Ga., wants addresses of manufacturers of machinery for making horse and mule shoes.

Hose.—Justin Matthews, Occidental Building, Little Rock, Ark., wants addresses of manufacturers of linen unlined hose.

Ice Machinery.—The Lippincott Company, Little Rock, Ark., is in the market for a 100-ton ice machine.

Lath Machinery.—The Morris Lumber Co., Slocumb, Ala., wants machinery equipment to make laths from slabs.

Letter Press.—Pembroke Warehouse Co., Pembroke, Ky., wants prices on typewriter letter presses.

Logging Equipment.—See "Railway Equipment."

Machine Tools.—Cleveland Iron Works, Shelby, N. C., wants three lathes from 4 feet to 20 feet in length, 14-inch to 30-inch swing; one planer 24-inch by 24-inch by 6-foot, one milling machine, one-drill press and one cupola about 4000 or 5000 pounds capacity.

Machine Tools.—Richmond Manufacturing Co., P. O. Box 734, Richmond, Va., wants prices on new and second-hand lathe, drill presses, etc.

Metal Ceilings.—James T. Harris, Spartanburg, S. C., wants to correspond with manufacturers of metal ceilings suitable for theater and brick stores.

Milling Machinery.—M. D. Landau, Vicksburg, Miss., wants addresses of manufacturers of outifts for milling placer gold.

Paving Improvements.—Board of Public Works, C. Lawrence Lavretta, president, Mobile, Ala., will receive bids until November 23 for resurfacing approximately 3500 square yards of asphalt pavements. Specifications for the work and other information regarding same may be had of the engineering department, J. N. Hazlehurst, chief engineer, Municipal Building. Usual rights reserved.

Piping.—Town Clerk, Brevard, N. C., will receive bids until November 20 for constructing sewers and water lines as follows: Furnishing all material and laying 7000 feet of 8-inch, 5800 feet of 6-inch and 75 feet of 15-inch terra-cotta pipe; also furnishing all material and laying 5500 feet of 4-inch water pipe, 16 fire hydrants, five 4-inch gate valves, two 6-inch gate valves and seven valve boxes. All work to be done under the supervision of the city engineer according to plans and specifications on file in the engineer's office. Usual rights reserved; A. K. Orr, secretary.

Piping.—See "Water works, etc."

Power Plant.—J. H. & J. W. Draughon, 404 Memphis Trust Building, Memphis, Tenn., wants information and prices on machinery and power for beehive power plant.

Pump.—Indiana Illinois Irrigating Co., F. M. Bullock, president, Glen Flora, Texas, will soon purchase a 36-inch pump, 50-foot lift, to be driven by turbine electrical outfit.

Railway Equipment.—Joseph E. Bowen, Atlantic Office Building, Norfolk, Va., is in the market for three mogul engines—two 14-inch and one 16-inch—or 10-wheeler standard gauge.

Railway Equipment.—Hemlock Lumber Co., Charleston, W. Va., wants to purchase a railroad velocipede, geared for both steel and wooden rail track.

Railway Equipment.—Durham Iron Works Co., East Main street, Durham, N. C., is in the market to buy or lease 250 tons 25-pound relaying rail.

Railway Equipment.—Hardwood Lumber Co., Augusta, Ga., wants a New York elevated railroad locomotive. Give description and price.

Railway Equipment.—Estifanulga Naval Stores & Manufacturing Co., Estifanulga, Fla., wants prices on about five miles of 40-pound steel rails, logging cars and locomotives.

Railway Equipment.—W. C. Hammond, Ashboro, N. C., wants to correspond with parties having tramway rails for sale or lease.

Railway Equipment.—S. W. Shoop & Co., Millville, W. Va., are in the market for second-hand rails, 30 to 60 pounds.

Road Improvements.—The Suwanee County Commissioners, Live Oak, Fla., will open bids December 8 for building 10 miles of hard road throughout the different sections of the county; bids to be received on entire mileage and also on any separate parts of it. Mr. Humphries is chairman of board.

Safes, etc.—Pembroke Warehouse Co., Pembroke, Ky., wants prices on safes, vault doors, etc.

Saw-mill.—See "Woodworking Machinery."

Saw-mill Equipment.—Big Sandy Crate Manufacturing Co., Big Sandy, Texas, is in the market for a small saw-mill, second-hand drag saw, etc.

Seating.—See "Church Furniture."

Sewer Material.—See "Water-works, etc."

Sewerage System.—The Shreveport Water-Works Co., Shreveport, La., will receive bids until November 24 for constructing approximately 12,000 feet of 8-inch and 10-inch vitrified pipe and cast-iron sewers in cuts varying from 6 feet to 30 feet. Profiles and specifications may be seen, and specifications, form of contract, bond and bid obtained at the office of J. H. Purdy, general manager, 1200 Bank for Savings Building, Shreveport, La., or at the office of the company, Shreveport. Certified check for \$500 must accompany each bid.

Shears.—The Hub Machine & Tool Co., 116 South 6th street, Philadelphia, Pa., is in the

market for one power shears to cut 1½-inch square iron; also power bender for light tires and one rotary shears to cut 1¼-inch iron.

Shop Machinery, Lathes, etc.—D. W. Ross, general purchasing officer, Isthmian Canal Commission, Washington, D. C., will receive bids until November 24 for furnishing shop machinery, lathes, planers, saw and timber-dressing machines, drills, engine, engine indicators, pressure gauges, lights, sheet steel, wire nails, surveyors' protractors and chains, blueprinting frame, safes, lamps, iron pails, milk cans, police whistles, dishes, kitchen utensils, knives, forks, scales, etc. Blanks and full information may be obtained at the office of general purchasing officer, or offices of the assistant purchasing agents, 24 State street, New York, N. Y., and Custom-House, New Orleans, La.; 36 New Montgomery street, San Francisco, Cal., and 410 Chamber of Commerce Building, Tacoma, Wash.; also from chief quartermaster, Department of the Lakes, Chicago, and Commercial Club, Mobile, Ala.

Shuttleblock Equipment.—Worth-Sherwood Shuttleblock Co., Greensboro, N. C., is in the market for machinery and equipment for shuttleblock factory.

Stave Mill, etc.—Estifanulga Naval Stores & Manufacturing Co., Estifanulga, Fla., wants prices on a complete portable stave mill and bolter.

Tank.—See "Water Supplies."

Tank and Tower.—See "Water-works, etc."

Tar.—See "Asphaltum."

Telephone Equipment.—Farmers' Mutual Telephone Exchange, Dr. Robert X. Wade, president, Weatherford, O. T., wants poles, wire, insulators and general repairs.

Tin Cans.—Mitchell Bros., Franklin, Texas, are in the market for full-gallon tin cans for syrup. Want cans that can be sealed (cork in hole, screw top on).

Toy Manufacturers.—The Essex Manufacturing Co., Box 885, Norfolk, Va., wants to correspond with manufacturers relative to making 200,000 newly-patented toys.

Turbine Wheels.—See "Pump."

Water Heaters.—C. C. Ensminger, 3 Blum Building, Jacksonville, Fla., wants estimates on water heater, capacity 150 gallons per hour.

Water Supplies.—Lee J. Grave, Spotsylvania, Va., will want equipment for water supply for hotel, including windmill, engine and tank.

Water-works.—City of Ballinger, Texas, J. W. Powell, mayor, will receive bids until December 1 for the construction of water-works, for which \$12,000 is available.

Water-works.—The Mayor and Board of Aldermen, Hammond, La., will receive bids until December 6 for the construction of water-works. Certified check for 5 per cent. of amount of bid must accompany each proposal. For synopsis of specifications, instructions to bidders and form of proposal address James B. Adams, town clerk; C. H. Jenks, Fayette, Miss., engineer in charge.

Water-works.—City of Davis, I. T., will open bids November 28 for constructing water-works, material to be furnished and work to be performed as follows: Excavating pit 35 feet deep and 10 feet in diameter and walling with cement mortar and hard-eye brick; pump pit 12x16 feet square and 10 feet deep, lined with concrete to a thickness of 10 inches; constructing power-house 34x44 feet (inside dimensions), foundation brick, corrugated sheet-iron superstructure as per plans; furnishing and installing on foundation one compound duplex pumping engine capable of delivering 400 gallons per minute against a head of 200 feet, with a steam pressure of 80 pounds, piston speed of 75 feet per minute; tubular return-flue-type boiler with a heating surface of not less than 750 square feet, built for a working pressure of 100 pounds, fitted with dome smokestack, smoke box, etc.; water heater, boiler-feed pump, hydrants, valves, 4000 feet 8-inch, 4000 feet 6-inch and 12,000 feet 4-inch cast-iron pipe and five tons special castings. A 50,000-gallon steel tank mounted on a 110-foot steel tower with a safety factor of six, as per plans and specifications, shall be erected on foundation of concrete. Proposal blanks furnished on application. Certified check for \$2000, payable to J. R. Clemons, mayor, must accompany each bid; W. P. Bullock, engineer.

Water-works, etc.—Bids addressed to Geo. W. Summers, secretary, Abbeville, La., will be received until December 4 for furnishing material and doing the work necessary for the construction of a water-works and electric-light plant. Material and work includes the following: Brick buildings, pumping engines, boilers, steel tower and tank, cast-iron pipe, hydrants and valves, automatic engines, direct-current generators, electric wire and pole material, machinery erection, pipe-

laying, drilling wells, sewer material and construction. Specifications will be furnished and plans can be seen at office of W. Mackintosh, engineer, Abbeville. Certified check for 10 per cent. of amount of bid must accompany each bid. Usual rights reserved; J. R. Leguenec, mayor.

Well-drilling.—See "Water-works, etc."

Windmill.—See "Water Supplies."

Wood-By-products Machinery.—Walter D. Wilcox, care Postoffice, Cienfuegos, Cuba, wants addresses of manufacturers of machinery and equipment for the distillation of wood.

Wood-fiber Plaster Machinery.—P. H. D. Rochemont, Oltewah, Tenn., wants addresses of manufacturers of wood-fiber plaster machinery.

Wood-fiber Plaster Machinery.—Kanawha Hardwood Co., Andrews, N. C., wants information in reference to machinery and process for preparing wood-fiber plaster.

Woodworking Machinery.—See "Lath Machinery."

Woodworking Machinery.—See "Furniture-factory Equipment."

Woodworking Machinery.—See "Saw-mill Equipment."

Woodworking Machinery.—See "Furniture Machinery."

Woodworking Machinery.—See "Shuttle-block Equipment."

Woodworking Machinery.—Ocean City Development Co., John Woodland, president, 211 North Liberty street, Baltimore, Md., wants prices on woodworking machinery.

Woodworking Machinery.—R. H. Martin, Maplesville, Ala., is in the market for a pony saw-mill and pony planer; second-hand in good condition preferred.

Wood-cutting Machinery.—W. C. Hammond, Ashboro, N. C., wants to purchase cord-wood cutting machinery.

Woodworking Machinery.—The Hub Machine & Tool Co., 116 South 6th street, Philadelphia, Pa., is in the market for one jointer to cut about 12 inches.

#### NAVY-YARD IMPROVEMENTS CONTINUED.

Contractors who bid on construction work and manufacturers who offer proposals for furnishing machinery for the various government navy-yards will probably be interested in a brief reference to the improvements contemplated for the Southern yards in the way of machine-shop facilities. Admiral C. W. Rae of the bureau of steam engineering, Washington, D. C., has submitted his annual report to the Secretary of the Navy, recommending the following improvements: Changes in existing buildings and the erection of a building for the storage of machinery, and the expenditure of \$40,000 for new tools, at the Norfolk navy-yard; erect a boiler shop, pattern shop and administration building at the Charleston navy-yard, \$100,000 for new tools and the removal of the Port Royal machine shop to Charleston; new foundry for the naval station at Key West; enlargement of the steam engineering plant, erection and equipment of new machine shop

Water-works and Sewerage.—It is reported that the city of Tampico, Tamaulipas, will soon begin the construction of water-works and sewerage system, for which plans have been progressing. Dr. Antonio Guzman is mayor of Tampico. (This item lately referred to with the name of city omitted).

#### MEXICO.

Carbonic acid Gas Plant.—La Favorita alcohol plant at Celaya will improve its plant, installing machinery for the manufacture of liquid carbonic-acid gas, which is collected during the fermentation of the corn in the making of alcohol. Don Adolfo Ayres, Torreon, Coahuila, Mexico, and Don Luis Veyan, Mexico City, are the owners of the plant.

Copper Mines.—Incorporated: The Chihuahua Copper Co., for developing mines in the State of Chihuahua, with capital stock of \$600,000. C. W. Hoyt of Boston, Mass., is president-treasurer.

Iron-mining and Manufacturing.—It is reported that the United States Steel Corporation of New York city has purchased and will develop the famous iron mountains near Durango, Mexico; also that the corporation will take over, enlarge and improve the National Iron Works at Durango.

Water-power-Electrical Plant.—A. W. L. Hendhal, Iturbide Hotel, City of Mexico, plans the development of water-power and the erection of an electric plant at Monterey, New Leon. His plans comprise the construction of a dam, a long duct five feet in diameter, the construction of a power-house of stone 100x140 feet, etc.; tube mentioned to be of steel supported by steel posts. Concessions have been obtained.

Water-works and Sewerage.—It is reported that the city of Tampico, Tamaulipas, will soon begin the construction of water-works and sewerage system, for which plans have been progressing. Dr. Antonio Guzman is mayor of Tampico. (This item lately referred to with the name of city omitted).

#### Railways.

Steam Railroad.—Reported that the Mexican Central Railway is surveying for an extension from Jimulco to Velardena. Lewis Kaufman is chief engineer at the City of Mexico.

Steam Railroad.—The Mexico, Oaxaca & Yucatan Railway Co. has been incorporated at Portland, Me., with \$1,000,000 capital to build railroad lines in Mexico amounting to about 1300 miles. The line is to run from the City of Mexico to the City of Merida in Yucatan, with branches, including one from Campeche to Belize in Honduras. The names of the promoters are not stated, nine residents of Portland, Me., being the nominal incorporators.

## INDUSTRIAL NOTES FROM ATLANTA

[Special Correspondence Manufacturers' Record.]

Atlanta, Ga., November 14.

The spirit of progress is abroad in the South. It is in evidence on every hand. One cannot single out any line of industry without having this fact impressed upon him with unmistakable regularity. Take the electrical-supply and manufacturing lines as an instance. But five years ago there were in Atlanta only two or three agencies representing Northern and Western electrical machinery and equipment houses; today there are nine branch houses and agencies representing Northern and Western electrical machinery and supply manufacturing houses, 10 local manufacturing concerns of importance and probably about 15 minor concerns.

The houses represented in Atlanta are the General Electric Co., Schenectady, N. Y.; Stanley G. I. Electric Manufacturing Co., Pittsfield, Mass.; Westinghouse Electric & Manufacturing Co., Pittsburgh, Pa.; National Electric Co., Pittsburgh, Pa.; Crocker-Wheeler Company, Ampere, N. J.; Fort Wayne Electric Works, Fort Wayne, Ind.; Allis-Chalmers Company, Milwaukee, Wis.; Western Electric Co., Chicago, and Wayne & Co., Chicago.

Of the local houses of prominence the following may be mentioned, which include supply as well as manufacturing interests: The Electric Manufacturing & Equipment Co., Southern Construction Co., Newcomer-Maury Company, Southern Electrical Construction

Co., Empire Electric Co., J. G. Kramer, W. R. Polk and Campbell Electric Co.

The Electric Manufacturing & Equipment Co. of Atlanta has added to its electrical-supply manufacturing business that of telephones. In this line, too, it would appear that the smaller towns and cities throughout the South are but beginning to realize the benefits the use of the telephone confers. There is evidently a great field for cultivation in the South in this particular line.

The Atlanta agents of the Northern and Western electrical-manufacturing houses report a large and increasing number of jobs ahead with regard to every phase of electrical work.

Not a little of the success which has attended the introduction and manufacturing of products, which of necessity call for the use of steam plants, in every section of the country can be readily traced to an observance of economic principles in manufacturing operations. In this connection the observance of these principles should naturally commence at that portion of a plant from which the power is derived, the source of animation, which, in turn, transmits and makes possible the successive processes peculiar to each industry. It is conceded by every intelligent steam-plant proprietor, the man who has watched innovations for the past quarter of a century, that among the factors which have placed the operations of

steam plants on an economic basis a prominent, if not the most prominent, position must be awarded the introduction of steam pipe and boiler covering. The steam-plant proprietor who has used it, and knows from experience what he saves in his fuel bill by its use, could not be induced to operate without it.

There are many plants in the South, as well as elsewhere, but particularly in the South, where a genial climate would not seem to indicate the necessity for pipe and boiler covering as in a colder latitude, where this important element of economic principle is lacking. The steam plant operating without pipe and boiler covering in the South, whether in December or July, is operating at a decided disadvantage. Such a plant cannot compete to advantage with one equipped in this respect, and while the introduction of this economical agent in saw-mills, oil mills, flour mills, machine shops and other lines is proceeding, there are yet many who are strangers to its benefits.

Every intelligent man who burns coal who has not already done so should seek the best obtainable method for economizing in the expenditure which is incurred in the production of heat or power through coal-burning. It has been truly said that more money is lost between the fireman's coal shovel at the boiler furnace and the flywheel of the engine than anywhere else.

Practical tests made times innumerable have demonstrated that magnesia coverings for steam pipes and boilers, being an efficient non-heating conducting agent, is an indispensable adjunct to a steam plant if a saving of energy is desired and a saving of fuel as a result. That industrial plants in the South operating by steam-power are realizing the correctness of this position is testified to by the activity displayed in the important branch house of the Keasby & Mattison Company of Ambler, Pa., at Atlanta, Ga. The latter, under the management of J. W. Stiles, is working to its utmost capacity to fill orders, and with the increase in business in this line continued in the same proportion as during the past year, the already large branch house must be again naturally increased in capacity. The interpretation of this pleasing feature of Southern development is that the operators of Southern steam plants are becoming alive to the question of economy in fuel, truly a vital one.

Mr. Stiles reports a steady demand for standard asbestos coverings, and has his hands full in the filling of contracts. The Keasby & Mattison Company's manager in the South, Mr. Stiles, reports an increasing demand for ring packing and asbestos gaskets for manholes, handholes and mud drums on boilers. This material is guaranteed to stand the highest modern steam pressures uniformly.

The Keasby & Mattison Company's new fireproof material for use in the building trades is having a heavy demand in the Atlanta territory. This applies also to all parts of the United States. The material which is designated the "Asbestos Century Shingles" or roofing shingles will, so it is claimed, last for a century without painting or any preservative treatment whatever, and when employed for practical fireproofing purposes the saving in insurance premiums is said to soon pay for the cost of the material. So great has been the demand for this form of roofing that the Keasby & Mattison Company, with a view of having sufficient manufacturing capacity to meet the requirements which they foresaw the future would demand, is now completing at Ambler, Pa., factory premises and buildings costing \$1,000,000.

If any one thing more than another marks the progress of a community the development of the painting and decorative industries may justly lay claim to that distinction. In this respect the growth of the firm of F. J. Cooleedge & Bro., Atlanta, Ga., illustrates how this house, like the city of Atlanta itself, is moving forward. The firm has an extensive factory, conveniently located for shipping and distributing purposes, right on the tracks of the Western & Atlantic Railway, well within the city limits.

The quality of the paint manufactured, made from pure linseed oil and dry colors of the finest texture, by this firm has tended to place the house in the enviable position it now enjoys. This is a Southern homemade paint house. Any color will be matched faultlessly and the goods in every case guaranteed. The factory is running to its full capacity, the large office and stores on North Forsyth street adjoining the Austell Building.

The firm is the Southern distributing agents for pure linseed oil, and also for the Penn-American Plate Glass Co., Pittsburgh, Pa. F. J. Cooleedge & Bro. has a branch house in Savannah, and they claim to carry the largest stock of paints, colors, oils and plate glass in the South.

The character of manufactured products of Southern industrial plants which find their way to distant lands—Europe, Asia, Africa and Central and South American republics—is steadily broadening, and of late progress along mechanical lines in foundry and machine shop work for export is becoming a marked feature in Southern development.

A firm which has taken the initiative in this respect in several lines of special machinery is the well-known Atlanta house, the E. Van Winkle Gin and Machinery Works. This concern, with its large plant, consisting of foundry and machine shops, has long been prominent as makers of an excellent design of cotton gin. The firm is also well-known makers of cotton and linseed-oil machinery, the E. Van Winkle Company make of oil mill being a familiar and interesting object of interest in every Southern State where cotton oil is extracted. The company has just completed a contract with a manufacturing house in Odessa, Russia, for an up-to-date six-press oil mill, same having been shipped from the company's works in Atlanta a few days ago. In addition to this a liberal equipment of cotton-gin machinery was also shipped according to contract specifications.

An important transaction was also closed with a firm in Peru, consisting of a complete oil mill, including presses, pump, hydraulic attachments, cookers, molders and rolls. The Allis-Chalmers Company, Milwaukee, has secured contract from the board of trustees of water works and improvement bonds of Jacksonville, Fla., for two 500-kilowatt 200-volt 60-cycle turbo-alternator units. The city is using a Curtis make of turbine, but its capacity was found insufficient, and the plans are to install the new Allis-Chalmers Company machinery at as early a date as practicable. The cost of the new outfit as specified by the contract is \$36,135.

The closing of this important contract by the Southern branch of the Allis-Chalmers Company, Atlanta, Ga., Maurice W. Thomas, Southern manager, is an important achievement, as it is the first contract of this nature secured by the firm in the South, and it was secured against active competition of leading makers of similar machinery.

J. C. Clark, manufacturer of phosphate and gold mining machinery, Empire Building, Atlanta, Ga., is the patentee of the Clark antifriction pulverizer, and is also president of the American Chemical & Mining Co. This latter firm turns out a very superior quality of mineral black, also plaster and finely-ground animal bone. In this latter, as in other respects, Mr. Clark has achieved a well-deserved distinction, inasmuch as the product is placed on the market in the form of an impalpable powder, soft as silk to the touch and absolutely uniform in texture. This circumstance reveals the degree of perfection which the Clark antifriction pulverizer has reached, and the fact that the supply is inadequate to the demand. Mr. Clark's machine shops being crowded in the effort to keep up with orders tells of trade activity.

Quite recently Mr. Clark has secured the Southern agency of C. Glaser, analytical and consulting chemist, 22 South Gay street, Baltimore, Md., who controls analyses for acid-phosphate manufacturers and approved method of sulphuric acid-plant construction in the United States, the patentee in this case being Dr. Th. Meyer, with regard to tangent chambers, of Germany.

Mr. Wm. M. Hale is manager of the construction department, and reports the closing of a contract with the Hampton Fertilizer Co., Hampton, Ga., for a large fertilizer plant, built in every respect on modern principles, with a capacity of 25,000 tons yearly.

J. B.

## INDUSTRIAL NEWS OF INTEREST

### Engineers for Big Dam.

The Roberts & Abbott Company of Cleveland, Ohio, has been employed as engineer for a reinforced-concrete gravity dam across Grand river for the Abbott Company, Painesville, Ohio. Work will be commenced at once.

### Ice and Laundry Plant Needed.

It is stated that an ice plant and a steam laundry is needed at Roanoke, Ala., in order to meet the needs of that little city. Messrs. P. G. Trent & Son of Roanoke can give information to parties who want to investigate.

### Offers His Services.

An experienced railroad man—promoting, financing and construction—seeks to give his services to capitalists needing a manager for a new enterprise. He will act on a salary basis. For particulars address A. T., care of the Manufacturers' Record. Letters will be forwarded promptly.

### For Road Machinery.

The Acme Road Machinery Co. of Frankfort, N. Y., reports several good contracts lately, among them being an order for \$10,000 worth of machinery, consisting of stone-crushing plant, etc., from the Independent Quarry Co. of Baltimore, plant to be erected at Hall Springs, Md.

### Manufacturing Suggestions Wanted.

Suggestions as to the installation of machinery for manufacturing some readily-salable product are wanted by Messrs. Randolph Bros. of Jefferson, Ga. This firm has 5000 feet of floor space and small power which they are desirous of utilizing, and in connection with this the suggestions are invited.

### Large Order for Elevators.

A very large order for freight elevators was recently closed through the Pittsburg office of the Otis Elevator Co. of New York for a single installation of 44 freight elevators in the new building of the Pittsburg Terminal Warehouse Co., Pittsburg, Pa. These elevators have a lifting capacity of 6000 pounds and a car travel of about 100 feet.

### Arkansas Lands for Sale.

Some Arkansas lands offered for sale by James C. Norman of Hamburg, Ark., are claimed to offer good opportunity for investment or development. They comprise 8000 acres of pine and 4000 acres of hardwood, and it is said the land is adapted to agriculture after the timber is cut. Full details can be obtained by addressing Mr. Norman.

### Death of Beauchamp H. Smith.

Mr. Beauchamp H. Smith, second vice-president of the S. Morgan Smith Company of York, Pa., died at his home in Los Angeles on November 1, at the age of 36 years. Mr. Smith went to Los Angeles about five years

and anticipate a busy future based on the prosperous condition and bright outlook of the South. The firm will appreciate receiving catalogues and price-lists for the files of its Southern office. The Atlanta office is at 1013 Century Building, Atlanta.

### Detroit Graphite Manufacturing Co.

Buyers in the territory centering at Atlanta, Ga., are advised that the Detroit (Mich.) Graphite Manufacturing Co. has removed its branch office in that city to 716 Prudential Building, where better facilities are provided. This will enable the company to handle to better advantage its well-known protective paints, for which there is a growing demand in the South. H. S. Gibbs has charge of the Atlanta offices as Southeastern agent.

### T. B. Davis, Jr., Appointed Vice-President.

It is announced that T. B. Davis, Jr., has been appointed vice-president of the Davis Coal & Coke Co., which has its offices in Baltimore, Philadelphia, New York and Boston. This company is well known to the consumers of coal throughout the country. It mines and ships the Davis locomotive, steam and smelting coals, and is sole agent for the Elk Garden Big Vein Cumberland coal, besides offering the Davis coke for ore smelters, foundries and family use.

### The Parkhurst Elevators.

Buyers of elevators should investigate the Parkhurst machines before placing their orders. The maker of the Parkhurst is very particular and careful to please customers on each and every sale, this being one of the secrets of its success. The Parkhurst Manufacturing Co. of Indianapolis, Ind., is the manufacturer in question, and has almost completed its extensive foundry and machine shop at Peru, Ind., for the manufacture of electric passenger and freight elevators. It is enjoying a large trade on them in all parts of the country.

### The Unique Water Pad.

There is now being marketed a device which aims to prevent the necessity for licking envelopes and stamps when sealing letters for transmission through the mails. The little office specialty referred to is manufactured and sold by the Unique Water Pad Co. of Asheville, N. C. This company states that the pad has proven entirely satisfactory in many offices, and that it is sanitary and odorless. The device is known as the Unique Water Pad, and it can be used for moistening any gummed surface. Write the manufacturer for further details.

### Continental Gin Co.'s New Offices.

Larger quarters have been secured by the Continental Gin Co. of Charlotte, N. C. The company has removed to the new offices, which are located at 301 West Trade street, on the main thoroughfare between the Southern Railway passenger station and the center of the city, and it has a large warehouse and showroom in a building just south of 301 West Trade street, facing on Poplar street. Correspondence can be addressed to the new offices, S. R. Jacobs being the district sales manager in charge. The Continental Gin Co. is of Birmingham, Ala., and it has large plants—six plants in Southern cities and one in Massachusetts—for manufacturing its well-known cotton-gin machinery.

### Roberts & Abbott Engaged.

The Roberts & Abbott Company has been engaged as consulting and supervising engineers by the People's Light & Railway Co. and the Streator Gas & Light Co. of Streator, Ill. These two properties have been recently combined, and the work of merging the power-houses is already under way. A very large saving in operating expenses will be effected. The Roberts & Abbott Company made a careful study of the situation previous to the consolidation, and since that time has been engaged in making the plans for the power-house and other construction details. Its offices are in the Schofield Building, Cleveland, Ohio; branch office in Maryland Trust Building, Baltimore, Md.

### Manufacturing Plant for Sale.

A modern manufacturing plant for building Corliss engines and for general machine and foundry work, located in Virginia, near iron furnaces, coal mines and coke ovens, is offered for sale. It includes machine, blacksmith and pattern shops, foundry with 6 and 10-ton cupolas, cranes, etc., spacious brick buildings, seven acres of land, side-tracks, etc. The property offers a good opportunity to some manufacturer in a position to utilize facilities of this character in the State named. Arrangements for a personal inspection or any further information wanted can be obtained by addressing H. E. Stafford,

1092 Banigan Building, Providence, R. I. Mr. Stafford will consider selling a half-interest.

#### Something About Acetylene Lighting

It is evident that acetylene illumination for railway cars, marine craft of every description, as well as for stationary illumination in ordinary buildings and in factories, has come to stay. When acetylene became a commercial success about five years ago the inventive genius throughout the country was attracted by the extreme simplicity of producing this brilliant light. This naturally resulted in the invention of many acetylene generators. The merit of the light made it possible to introduce many inferior machines, lacking in scientific and safeguarding principles. An occasional explosion with loss of life resulted. The popular mind was prejudiced against acetylene as a consequence without regard to the fact that an acetylene-gas machine constructed on scientific lines is safe in operation as either an electric or steam plant with ordinary precaution exercised. The modern acetylene-gas machine can be operated with absolute safety continuously. This is sustained by the committee of consulting engineers of the National Board of Fire Underwriters, which, as a result of its careful inspection in that line, has decided to offer insurance policies on railway cars and craft of all kinds which operate acetylene machines made by certain firms without an extra charge. Today acetylene generators are constructed and installed by large and responsible manufacturers in such manner and accompanied by such guarantees that complete satisfaction is afforded in their use for many years without repairs or renewals. There are many advantages which acetylene illumination offers. The burners are of small capacity, consuming about one-half cubic foot per hour, while the standard city gas burners to produce the same amount of light consume from five to six cubic feet per hour. It is claimed that the cost of light from acetylene is less than the cost of light from ordinary gas, even in large cities, and is cheaper than kerosene, while it yields a flame of unsurpassed intensity, while being agreeably soft. No better proof of the utility and safety of acetylene can be advanced than the fact in 1904 25,384 buildings in the United States were lighted with this modern illuminant. Among the firms manufacturing acetylene machinery are the following: The Commercial Acetylene Co. of New York, the General Acetylene Co. of New York, and the Epworth Gaslight & Heating Co. of Waterloo, Iowa.

#### Air Power in Railroad Shops.

Compressed air has become as essential in railway-shop work as steam for power or electricity for lighting. Hardly a process of locomotive or car building and repairing is not aided by some form of air tool. The air compressor, as the source of power for these pneumatic tools, assumes an important place in the shop equipment. In the shops of the Union Pacific Railway at Omaha, Neb., air power has been carried to a degree of application probably equalled in no other shop of the country, and the extent of its use has made necessary an air-compressor installation ranking among the largest for this purpose. This air-compressor plant was furnished by the Ingersoll-Sergeant Drill Co. of New York.

#### Concerning Telephone Progress.

A recent letter of the Citizens' Telephone Co., Grand Rapids, Mich., is of interest. It says that the company's exchange has experienced a net gain of 829 telephones from January 1 to September 25. The company began service with its automatic exchange in January, 1904, displacing a manual telephone exchange with 594 telephones. Soon after this a general increase of rates was inaugurated, but, nevertheless, the subscribers increased steadily, the total being 1629 in 12 months. It is evident that the Citizens' Telephone Co. attributes this largely to the automatic exchange, as it writes the Automatic Electric Co. giving full particulars regarding the success met with. The Automatic Electric Co. manufactures the automatic exchanges, and has its main offices at Morgan and Van Buren streets, Chicago.

#### Technical Publicity Association.

At a meeting and banquet of the Technical Publicity Association, held at the Aldine Club, New York, on November 3, the following officers were elected: President, C. B. Morse, Ingersoll-Rand Drill Co.; first vice-president, H. M. Cleaver, Niles-Bement-Pond Company; second vice-president, Frank H. Gale, General Electric Co.; secretary, Rodman Gilder, Crocker-Wheeler Company; treasurer, H. M. Davis, Sprague Electric Co.; members of executive committee, Graham Smith, Westinghouse Companies, and

Chas. M. Manfred, Johns-Manville Company. Mr. H. M. Davis addressed the association on "The Advertising Appropriation." An informal discussion followed, in which the members exchanged views on the disposition of advertising appropriations, the relative amount that should be spent in magazine and circular advertising, the relation between the advertising appropriation and the volume of business, etc.

#### Gough, Burke County, Georgia.

Active steps are now being taken to present the agricultural and industrial advantages of Burke county, Georgia, to investors, farmers and settlers seeking locations in the South. The recent completion of the Augusta & Florida Railroad through the western portion of the county has opened a country which has industrial possibilities and fertility of soil which are certain to hasten the development of its resources. The Gough Land & Improvement Co. has been organized to present these advantages to those who may be interested, and a new town named Gough has been located. The site was a cotton field two months ago, but now it presents an entirely different aspect, modern streets and sidewalks having been laid out, many buildings are being erected, and several industrial enterprises have been secured for establishment. The Gough Land & Improvement Co. owns the townsite and is offering special inducements at this time to induce purchases. Details can be obtained on application.

#### Cook's Metallic Packing.

Cook's Metallic Packing is offered as one that will pack any class of engine without change of design. Some of the largest industries in the world are using Cook's packing. Its first distinguished feature stands boldly out in that no stuffing boxes are ever designed for it. In using Cook's Metallic Packing it is of little concern whether engines have any stuffing boxes or not. The packing is made for engines and is conformable to every type. The packing is entirely metallic and steam adjustable, and does not wear a rod. It has one wearing part—the sectional babbitt ring, which is so durable and so cheap that the maker states the current cost of Cook's Metallic Packing does not average 10 cents per inch diameter of rod per annum. Users of packings are invited to correspond with the manufacturer and have a comparative test in their plants. The qualities of a superior metallic packing that are embodied in one that possesses great simplicity, will run the longest, with the least lubrication and the least adjustment, with the least wear to the rod, and do these things under the most variable conditions and involving the least possible expense are the qualities claimed for Cook's. Write the maker, C. Lee Cook Manufacturing Co., Louisville, Ky.

#### Paper-Mill Industry.

The Westinghouse Electric & Manufacturing Co. of Pittsburgh, Pa., whose name is prominently associated with the paper-mill industry, has recently equipped a number of grinders with A. C. motors. The question of driving grinders by means of electric motors has been agitated for several years, and there has always been some question as to the feasibility of the scheme. The operation of the grinders installed, however, has been so entirely satisfactory as to leave no question, so far as the practicability and efficiency of this drive are concerned. The Westinghouse Electric & Manufacturing Co. continues to have an enormous demand for the A. C. motors of the "CC" type. The favor with which these motors have been received has surpassed expectations, and it is a matter of extreme gratification to note the entirely successful operation of the motors, even under the most severe conditions. A large marble plant has recently been equipped, and although the motors have been operating under overloads and under conditions which require the strongest mechanical construction, their operation has left nothing to be desired. Increase in production and decrease in operating costs, as well as absence of the multiplicity of belts, are among the principal features noted in connection with this installation.

#### E. C. Atkins & Co. in Atlanta.

E. C. Atkins & Co., Inc., of Indianapolis, Ind., have had a branch house in Atlanta, Ga., for six years. At first the representation consisted of a light stock of saws with desk room. The business grew so rapidly that each year witnessed a substantial addition to the amount of stock carried, office accommodations and clerical force. About two years ago the business developed to such an extent that new and more commodious quarters were indispensable. This was secured in the present quarters, but the present fa-

cilities are now inadequate, and plans for the erection of a handsome structure are under contemplation. The history of this well-known company's Atlanta branch reflects forcibly the growth of the South during the past six years. The company carries at Atlanta a line of saws, circular and horizontal, wooden and steel split pulleys, rubber and leather belting, shafting and machinery value at \$65,000. One of the floors of its four story building is devoted to repairing, grinding and fitting up saws. A regular machine shop equipment is in continuous operation. The basement is stocked with iron pulleys; the floor on level with Marietta street is devoted largely to offices and tools, saws and equipment on exhibition—a modern salesroom, in fact, 100x80 feet. G. R. Stafford, the Atlanta manager, takes special pride in referring to the wonderful growth of his branch.

#### The Chicago & Alton Railway.

When a railroad has laid its rails of heavy steel on a roadbed of solid, dustless rock, built bridges of strongest steel and firmest masonry, reduced grades and eliminated curves to the minimum, installed a perfect block-signal system, provided every efficient safety appliance in couplers and brakes, furnished cars that have the maximum strength, secured engines that will pull their loads with ease and speed, manned trains with employees who have passed a rigid examination as to physical and mental abilities, and when every resource of science, skill and experience has been employed in track and equipment, that railroad has fulfilled its duty to the public. But when, in addition, a railroad furnishes restful chair cars without extra cost, service and meals only equaled in the highest-class restaurants, smoking apartments in which you long to linger, libraries filled with readable literature, writing desks and stationery, cars brilliantly illuminated with electricity—cooled in summer with electric fans and warmed in winter with steam heat, the latest conceptions in sleeping cars and parlor cars, cars handsomely decorated with original and exclusive designs and even carrying rich and distinctive colors on the outside that instantly distinguish them from other trains, then that railroad does more than its simple duty and establishes a claim for patronage to which the traveling public is quick to respond. These are some of the reasons why the Chicago & Alton Railway is known as "The Only Way," and explain why it carries such a large share of the travel between St. Louis and Chicago and between St. Louis and Kansas City. And when that road is so fortunately located as to give it a short line, the tendency to use it on the part of all the people who know it is almost irresistible.

#### Taylor Iron & Steel Co.

A meeting of the directors of the Taylor Iron & Steel Co. in New York on October 31 resulted in several changes in the executive officers. Lewis H. Taylor resigned the presidency, and was succeeded by Robert E. Jennings of Jersey City, who has been vice-president since the company organized in 1891. Percival Chrystie was elected vice-president to succeed Mr. Jennings. Knox Taylor was elected general manager. The other officers are: Dr. Henry M. Howe, vice-president, and T. F. Budlong, secretary-treasurer. Mr. Taylor has desired to resign for several years because of advancing age, and the directors have unanimously elected him honorary president. Mr. Jennings was formerly with the Spaulding & Jennings Company of Jersey City, later with the Crucible Steel Co. of America, and still later receiver of the Carpenter Steel Co. of Reading, Pa. When the latter company reorganized recently he was elected president, which office he now holds. Mr. Chrystie has been connected with the Taylor Iron Works and the Taylor Iron & Steel Co. in various capacities since 1887, and Mr. Knox Taylor has been with the company for four years. Mr. Chrystie and Mr. Knox Taylor make the fifth generation of the Taylor family who have been interested in the manufacture of iron and steel in Hunterdon county. The Taylor Iron & Steel Co.'s main offices continue at High Bridge, N. J.

#### Numerous Flour-Mill Contracts.

Flour millers and others interested in the latest types of improved grain-milling machinery will find the list below indicative of superiority. It is not probable that so many contracts would be awarded to one company unless its make of machinery was giving satisfactory results. The contracts were obtained through the Minneapolis branch (No. 22 Corn Exchange Building) of Messrs. Sprout, Waldron & Co., the Monarch mill builders, of Munsey, Pa. They were as follows: A. H. DeLong, Forest City, Minn., for sifters, etc., for remodeling 75-barrel to Monarch system; Crookston Milling Co.,

Crookston, Minn., for 200-barrel mill; New London Milling Co., Wilmar, Minn., for sifters, etc., to remodel 100-barrel mill to Monarch system; Henry Russell, Butternut, Wis., 50-barrel mill; David Hutton, Preston, Minn., for rolls, sifters, etc., to remodel 75-barrel mill to Monarch system; Renville, Minn., for sifters, centrifugal reels, etc., for remodeling 100-barrel mill; Marcus Milling Co., Goodhue, Minn., for Monarch sifters; Lampert Lumber Co., Henderson, Minn., 100-barrel mill. Through the Michigan representative Sprout, Waldron & Co. obtained the following orders: H. W. Wilson, Marquette, Mich., for rolls, sifters, etc., to remodel 100-barrel mill to the Monarch system; Eureka Mill & Elevator Co., Brown City, Mich., sifters, etc., to remodel 100-barrel mill to Monarch system. Other contracts included Robert Jamieson, Fredonia, Pa., 30-barrel mill; Eulalia Milling Co., Coopersport, Pa., buckwheat mill on roller system; Shuping Bros., Rock, N. C., one three-pair high-roller corn mill; M. S. Wise, R. F. D. No. 1, Forsyth, Ga., 40-barrel mill; John Lovell, Bybee, Tenn., 30-barrel flour mill; W. W. Warren & Co., Jumping Branch, W. Va., 30-barrel mill; M. C. Gregory, Unadilla, N. Y., sifter to remodel to Monarch system; E. B. Crotts, R. F. D. No. 4, Lexington, N. C., 40-barrel mill; Frank J. Bergey, Frenchville, Pa., 50-barrel buckwheat mill; J. Prince Lear, Searletown, P. E. I., Canada, 60-barrel mill.

#### TRADE LITERATURE.

##### New Crocker-Wheeler Bulletin.

The Crocker-Wheeler Company of Ampere, N. J., has issued Bulletin No. 61 (superseding Bulletin 45) to describe the belt-type direct-current machines for general power purposes and small lighting plants. The Form D machines described are the highest development of the open-belt motors and generators, having all the improvements in design and construction that practical experience has demonstrated are necessary or desirable.

##### A. C. Generators—Water-Wheel Type.

The fundamental characteristic to be taken into consideration in the construction of generators for attachments to water-wheels and generally used for long-distance transmission purposes is absolute reliability. This characteristic is claimed to be the leading factor in the reception given the water-wheel type alternating-current generators built by the National Electric Co. of Milwaukee, Wis. Bulletin No. 360 has been published to describe these generators. Send for a copy.

##### Lathes, Sanders, Shapers, etc.

An illustrated catalogue of the Ober lathes, sanders, shapers and other machinery for handle, spoke and variety turning has been issued. It gives data that will interest woodworkers and all who may contemplate installing equipments for various kinds of woodworking. Handles, spokes, whiffle trees, gunstocks, lasts and other wood products are turned by the Ober machinery. The Ober Manufacturing Co. of Chagrin Falls, Ohio, manufactures the Ober equipments. Write for the catalogue of details.

##### Some Leland Moore Offerings.

Recent literature issued by the Leland Moore Paint & Oil Co. refers to some of the company's products which have become noted for their merits. "Stopleak" is one, being a material to make roofs tight and waterproof. It is a roof cement, put up in different sizes, and is easily applied. Other Leland Moore products include Lemoco white lead and pure mixed paints for every purpose. The company does its own manufacturing, and has an extensive plant for that purpose at Charleston, S. C.

##### Niles-Bement-Pond Literature.

The November number of the Progress Reporter contains interesting information for users of heavy boring and turning mills, spinning machines, rifling machines, electric hoists, plate planers, etc. These modern machines are described and their uses noted, and the success which they have attained in modern industrial life is pointed out. The Niles-Bement-Pond Company of 111 Broadway, New York, is the manufacturer of the tools mentioned, and each month issues the Progress Reporter to keep its employees and the public generally informed as to the new machine and devices which are constantly being brought out.

##### Machinery for Sugar Industry.

The sugar industry is one that is of considerable importance in the cane-growing section of the South. The machinery required by the sugar and syrup manufacturers comprises equipments on which much ingenuity is expended in designing and manufacturing.

New  
sift-  
Mon-  
Wis.,  
Minn.,  
barrel  
filling  
fugal  
mill;  
, for  
Hen-  
the  
ron &  
I. W.  
s, etc.,  
march  
rown  
barrel  
tracts  
a, 30  
ders-  
stem;  
e-pair  
F. D.  
John  
1: W.  
Va.  
a. N.  
n: E.  
N. C.  
ville,  
Prince  
barrel

#### The Champion Stalk Cutter.

Planters will find something for their attention in the leaflet which the Columbus Iron Works Co. of Columbus, Ga., has issued to present details of the Improved Champion Stalk Cutter. This machine is built for durability and service, and it has given excellent satisfaction wherever used. Its construction is such that it operates smoothly, without that constant jarring and shaking incident to some cutters. Several tons in weight can be carried so that it will cut large stalks. This machine can be obtained without the frame, which latter can be made by any farmer. Write the Columbus Iron Works Co., Columbus, Ga., for description.

#### Bargains in Electric Equipment.

If you are in the market for electric machinery or supplies of any kind, examine the November Bargain Sheet of the Gregory Electric Co. The sheet gives a list of the dynamos, motors, transformers, arc lamps, etc., in stock at the company's works ready for immediate shipment. All the machines are in first-class condition, and buyers will find the offerings varied enough to suit almost any requirement. The stock offered is the product of the best-known manufacturers, all of the machines being rebuilt or repaired and put in the best possible condition before they are offered to buyers. Write the company at 54 South Clinton street, Chicago, for booklet.

#### Mechanical Rubber Products.

A card is being distributed which gives photographic reproductions of a few (about 15) specimens of work in molded soft-rubber parts, for a variety of purposes, which will give an idea as to the facilities of the manufacturer. The Cleveland Rubber Works of the Mechanical Rubber Co., Cleveland, Ohio, is the manufacturer referred to. This company has been in business over 30 years, and its product has gained an enviable reputation for superiority both in quality and finish. If you are interested in any item of soft rubber, or if you could use this class of material to advantage in some place where you are now using wood, leather or metal, write the company, giving full description, or send drawings or samples, and it will take pleasure in figuring with you.

#### The American Company's Rail Bonds.

A leaflet issued by the American Steel & Wire Co. is now being distributed. It gives particulars regarding the company's Crown United States soldered twin terminal rail bonds, the merits of which, in the various styles offered, have won an enduring reputation for these bonds from discerning buyers. Various new devices are shown in the leaflet, all of them patented or patents applied for. Hydraulic compressors, grinding machines and tools, for attaching soldered rail bonds and other devices are also shown. The American Steel & Wire Co. installs bonds of any type and manufactures all tools and supplies necessary for installing soldered bonds, and catalogues describing the complete equipments are sent on request. The company's offices are in Chicago, New York and other large cities.

#### A New Hoisting Drum.

A new hoisting drum called the "Two in One" is now being introduced by well-known manufacturers. This drum will save you money if you have a single-drum engine and wish to operate a double-chain automatic bucket, or a double-drum engine and wish to operate a double-chain automatic bucket and raise or lower the boom at the same time. The "Two in One" Hoisting Drum is just what its name implies—two drums mounted on the same bedplate and acting as one drum. It is not connected to the engine by gears or sprocket chains, so the necessity of changing your present engine in any way is eliminated. Full details regarding the new drum and valuable uses to which it can be put are given in a little booklet which the manufacturers are issuing. Write the Hayward Company, 97 Cedar street, New York, for a copy. That company makes the "Two in One."

#### Johnson Wrecking Frog Co.

Railroad managers and other operators who use railway equipment will find a description of the Johnson frogs of especial interest to them. The various types for locomotives and

railroad cars of different sizes and build are shown in a little book now being distributed. All the details are clearly indicated, and buyers of railway frogs will find that while the frogs differ in weight, size and shape, they all have the same characteristics in their construction—characteristics which have made these frogs invaluable wherever used. In strength, wearing capacity and general excellence the Johnson frogs have so commended themselves as to lead to their use by many of the leading railway companies in the United States, and some of the types are especially valuable to wrecking outifts. The Johnson Wrecking Frog Co. of Cleveland, Ohio, manufactures these Johnson frogs; offices at 526 Citizens' Building, on Euclid avenue.

#### Concerning Mechanical Draft.

Bulletin No. 75, entitled "Mechanical Draft: What It Is, What It Does," has just been issued by the B. F. Sturtevant Company of Boston, Mass. This booklet not only briefly presents the salient features of this system of draft production, but illustrates a variety of plants which clearly show "what it is." The suggested query in the words "What it does" is answered thus by the company: It does what an ordinary chimney is incapable of doing. Its cost is from 20 to 40 per cent. of that of a chimney. Its intensity permits of the burning of finely-divided or low-grade fuel. It makes possible the utilization of the heat of the flue gases which a chimney wastes in producing draft. It is independent of the weather, is automatically regulated to maintain constant steam pressure, decreases smoke, increases the capacity of an existing plant and serves as an auxiliary to a chimney already overburdened; saves space and is portable.

#### The Fishkill Corliss Engines.

Users of steam power generally will be interested in the new catalogue of Fishkill Corliss Engines, in which is shown the various styles of Corliss engines built by the Fishkill Landing Machine Co. of Fishkill-on-the-Hudson, N. Y. The book is attractively designed and printed and finely illustrated throughout, and contains much valuable information for those in charge of the modern steam plant, and would make a valuable adjunct to any engineer's library. Following a very complete description of the engines built the several parts are shown, including the well-known valve gear and vacuum dash pots, which have contributed so largely to the popularity of the Fishkill type of Corliss engine. A long list of references given lends additional emphasis to the company's statement that its product is unsurpassed in point of economy, close regulation and noiseless operation. The Fishkill Landing Machine Co. will gladly send copies of the new catalogue to engineers and others interested upon application.

#### Goods for Engine Builders.

There has been issued an illustrated pamphlet which describes a line of goods which are the result of careful study of the most modern requirements of engine builders, also builders of other machinery. The goods include oil and grease cups finished upon the inside, thereby preventing any loose sand or brass getting into the bearings. Another product is the stamped nut cover, the use of which over foundation bolts on engine beds makes a material saving in cost and adds greatly to the finished appearance of the machine. The Erie Stamping & Manufacturing Co. of Erie, Pa., issues the pamphlet mentioned. This company has become widely and favorably known for the perfection of its product in the way of oil cups, grease cups, oil reservoirs, nut covers, metal stamping of all kinds, brass-foundry work, electroplated work, etc. The Erie manufacturing plant is an extensive one, thoroughly equipped with the latest machinery needed in the line of activity in reference, and all the Erie Stamping & Manufacturing Co.'s specialties are constantly being improved as suggested by experience. Its products have been giving satisfaction to some of the most exacting buyers of the country.

#### Briggs Labor-Saving Specialties.

Men engaged in contracting work where labor-saving devices are required for handling dirt and other similar materials, laying concrete, etc., will find some interesting facts for their consideration in some printed data now being distributed by the J. E. Briggs Labor-Saving Specialty Co. The literature tells about the efficiencies of the Briggs Lightning Dump Wagons for contractors, the Briggs Contractors' Dump Wagon, Loading Hopper, Concrete Spreader and other devices which have been perfected and proven their worth in some of the most exacting contracts that have been undertaken in road-building, railway construction, canal excavat-

ing, dam work, paving contracts and others where such equipment finds its sphere of usefulness. In sending out the information regarding the above-named devices the Briggs Company says it is now preparing an attractive illustrated catalogue which will present in more convenient form and in more detail information which contractors will find invaluable for examination when they are about to buy machinery needed in their branch of activity. Write the J. E. Briggs Labor-Saving Specialty Co., offices and factory at Waterloo, Iowa.

#### Seamless Insulated Wires and Cables.

The seamless insulated wires and cables are offered to insure the transmission of electric currents of any voltage with safety. They are the product of the Safety Insulated Wire & Cable Co., and claimed to be the highest type of insulation known, manufactured from pure matured Para rubber, applied in a seamless manner to the copper conductor. The wire used is drawn from the ingot and billet at the company's New Haven mills, and its own experts in South America choose the highest grade of rubber in the forests of Brazil and Peru, shipping same direct to the company's Bayonne insulating plant. Controlling all the raw materials entering into these insulated wires and cables, the manufacturer fully guarantees them. Safety-seamless-rubber insulation, from its perfect service, is used largely throughout the United States, the maker claiming that 75 per cent. of the modern office buildings of New York and other large cities having it in position. An illustrated pamphlet replete with information regarding the product of the Safety Insulated Wire & Cable Co. is now being distributed, and those interested are invited to send for a copy, addressing the main offices at 114 Liberty street, New York.

#### Insulator-Pin, Bracket and Cross-arm Machinery.

A catalogue now being distributed shows a line of insulator-pin, bracket and crossarm machinery in such a manner that its details may be clearly understood by anyone. The machines are said to be simple in construction, easy to operate and little apt to get out of order. The Chattanooga Machinery Co. of Chattanooga, Tenn., builds the machinery noted, and refers to the fact that it is constantly improving its equipments and introducing new machines for special work. During the past year many improvements have been made to the standard and combined pin machines, also to the special machine for turning and threading pins up to 30 inches in length. Besides this line of pin, bracket and crossarm machinery, the Chattanooga Company builds a large line of standard and special saw-mill and woodworking machinery. In the catalogue there are presented photographic views of the various sizes and styles of pins, brackets and crossarms made by the machines, as well as of the machines themselves. Manufacturers who may think of installing any of the class of machinery mentioned, or those who may contemplate establishing factories where the above class of machinery is needed, are invited to write for the company's estimates before placing contracts. Requests for the catalogue are invited.

#### Diversified Uses of Portland Cement.

An unusually well-illustrated pamphlet has been issued to show work done exclusively or in part with Old Dominion Portland cement. This brand of cement is especially adapted for making artificial stone. It is guaranteed to meet the requirements of all standard municipal specifications, also the specifications of the corps of engineers, U. S. A.; the American Railway Engineering and Maintenance of Way Association, the American Society for Testing Materials and the Association of American Portland Cement Manufacturers. In the event of any dispute in the tests of the interpretations of specifications, samples of cement and copy of specifications are to be sent to the laboratory of Froehling & Robertson, Richmond, Va.; Booth, Garrett & Blair, Philadelphia, Pa., or Robert W. Hunt, Chicago, the result of whose test is to be final. The pamphlet mentioned presents photographic reproductions, including some of the most important work in the South, including the Atlanta (Ga.) passenger station, concrete filtration basin at Washington, D. C.; United States Printing Office, Washington, D. C., in which 18,000 barrels of the cement were used in making concrete floor arches; United States navy-yard buildings in various cities, and numerous others of equal and greater importance, including residences, clubhouses, factory buildings, office structures, locks, chimneys, etc. The pamphlet is entitled "Diversified Uses of Portland Cement," and it is published by the Wm. G. Hartranft Cement

Co., Real Estate Trust Building, Philadelphia, Pa., sole selling agent for the Virginia Portland Cement Co., which manufactures the Old Dominion brand at its plant in Virginia.

#### Yale & Towne Electric Hoists.

These hoists are designed to meet the growing demand for simple, convenient and durable power hoists. They are made to withstand rough usage and to give satisfactory service in the hands of inexperienced workmen. They may be hooked in any overhead trolley or other support; may be moved from one place to another as readily as a chain block, and used wherever electric current is available. Installation involves simply hanging the hoist and connecting two wires. These hoists may be used to increase the efficiency of hand cranes, and are so compact that they may be hung up and operated in small space. The single upper hook makes a flexible connection to overhead supports, so that lifting may be done at an angle without causing side strains on the hoist. Where head room is limited the upper hook may be removed and the hoist connected closely to the trolley, thereby taking up less head room than any other power hoist. All parts are made to gauge, thus securing complete interchangeability. The motor is placed above the oil-submerged gearing, preventing the possibility of oil entering the motor. The oiling devices preclude heating or injury from the high temperatures usually existing near the ceiling. The lead is taken on wire hoisting rope of tough steel, wound on grooved drums. At the bottom hook the rope passes around an equalizing sheave, thereby balancing the strain. All parts under tension or subjected to transverse stress are of forged steel or wrought iron. These hoists are operated from the floor near the load to be handled. They are fully described and illustrated in a catalogue now ready. Write for a copy. The manufacturer is the Yale & Towne Manufacturing Co., 9 Murray street, New York.

#### Hydraulic Accumulators.

Hydraulic accumulators and a few valves especially used with accumulators are described fully in Catalogue No. 67 of the Watson-Stillman Company of 45 Dey street, New York. The types shown are the result of attempting to fill the requirements of location or working conditions. An accumulator should bear the same relation to a hydraulic system that the balance wheel does to an engine, that is, to receive the excess of pump delivery above the momentary demand of the machine and deliver it when the demand is above the normal. In size the ram should be large enough, particularly in the weighted types, to prevent a high speed in descent, as the inertia with quick changes in speed throws excessive strains upon the entire system as well as over-pressure upon the work. The type of accumulator desirable for any particular location is to be decided largely by the working condition and character of the foundation permissible, while the size will have to be determined by the number of machines and the size of the cylinder to be filled, and particularly the number to be filled at one time. The working pressure of the system will influence somewhat the selection of the type as well as the size and weight of the parts. The pump should have sufficient delivery to prevent the descent of the ram (or cylinder) more than one-half or two-thirds of its maximum movement, but not be so large as to be out of action a large proportion of the time unless the accumulator is of a pump-governing type or variation in power required to operate it inconsequential. In large systems it is frequently desirable to have the accumulator perform both its normal function for one pump and act as a governor to a second or third pump, which can be done easily. Write for the catalogue and read the details for yourself.

#### Economizing Steam Specialties.

Since the inception of steam as a prime mover the study of engineers has been the economic production of power. This has resulted in a series of engines from the ordinary slide-valve to the quadruple-expansion type, and later steam turbine. In the boiler it is the aim to apply the least amount of water constantly to the greatest area of heating surface obtainable. This is accomplished by the aid of a mechanical device which in itself must be reliable, positive, absolute in its action and preclude all possibility of failure through faulty design or objectionable features in manufacture. The device is described in an illustrated pamphlet which presents details regarding the Williams Feed-Water Regulator. This regulator is constructed around a principle which is the result of 25 years' study of boilers and their varying conditions. It has been in use in a number of plants for periods varying from seven to ten years, and its actual cost

of maintenance, its manufacturers claim, will not exceed 1 per cent. of the original cost annually. It has yet to demonstrate its inability to perform the functions claimed for it, and its best recommendation is that its oldest users are repeating their orders in every instance when new boiler is added to their present power plants. The Williams regulator is now used in plants having 1,250,000 horse-power, including the most prominent among the iron and steel and other large manufacturers throughout the country. The Williams Steam-Operated Trap, Williams Steam-Pump Governor, Williams Rotating Regrinding Gauge Cock and the Williams Quick-Closing Water Gauge have also made a reputation for their efficiency in the duties which they are designed for. Full particulars regarding all these economizing steam specialties are presented in the pamphlet mentioned. Address the manufacturers, the Williams Gauge Co., 543-57 Fourth avenue, Pittsburgh, Pa., for a copy of the publication.

#### Webster's International Dictionary.

Many persons consider the dictionary merely as a spelling-book, or at least a book from which to learn the derivation, spelling, pronunciation or definition of words. While Webster's International Dictionary is acknowledged to be superior in these particulars, it also furnishes in the appendix a vast amount of valuable information. In the various departments one learns not only the spelling and pronunciation of names, but brief facts concerning over 10,000 noted persons of ancient and modern times, also concerning countries, cities and natural features of every part of the globe. It contains Scripture, Greek, Latin and English proper names and quotations, phrases, proverbs, etc., from the Greek, Latin and modern foreign languages. Then there are tables of abbreviations and contractions, and of arbitrary signs used in writing and printing, and last, but not least, there are 80 or more pages of classified illustrations. As a whole, probably no other single volume before the English-speaking public embodies so much information on the subjects treated or is so valuable for frequent consultation or so indispensable to the household, the scholar, the professional man and self-educator as the latest Webster's International Dictionary. To the book has recently been added 25,000 new words and phrases, which together constitute the most accurate, practical and scholarly vocabulary of the English language, and, in addition, the following valuable features: Colored plates, giving recent and authoritative reproductions of flags and arms of various nations, State seals, yacht flags, pilot flags, etc.; memoir of Noah Webster; list of authors quoted; brief history of the English language by James Hadley, thoroughly revised by Prof. G. L. Kittridge of Harvard; Indo-Germanic roots in English by Prof. August Fick, Breslau, Germany; guide to pronunciation, fully explaining the various English sounds and the simple Webster system of diacritical marks, and to this is added a list of more than 1400 words differently pronounced by leading orthopædist; principles of orthography, with important rules for spelling, list of words variously spelled, reformed spellings, etc.; dictionary of noted fictitious persons and places often mentioned in literature; completely revised pronouncing gazetteer of the world, with over 25,000 titles, the figures for population and area agreeing with latest census reports; completely revised pronouncing biographical dictionary, containing names of over 10,000 noteworthy persons of ancient and modern times, with nationality, occupation, dates of reigns, date of birth, death, etc.; pronouncing vocabulary of Scripture names; pronouncing vocabulary of Greek and Latin names; vocabulary of Christian names, with pronunciation, derivation, meaning, nicknames, etc.; quotations from foreign languages translated into English; abbreviations and contractions used in writing and printing; arbitrary signs, and classified selection of illustrations. The G. & C. Merriam Company of Springfield, Mass., is the publisher, and will send specimen pages showing the complete scope of the work to any inquirer.

#### The Iron and Metal Trades.

The *Iron Age* in its weekly review says:

"There continues to pour in from all quarters evidence of the enormous current consumption of iron and steel, with ample proof in the form of fresh orders that there will be an unabated strain upon our productive facilities for many months to come."

"There is no truth in the report given wide currency that the Steel Corporation had purchased 50,000 tons of Bessemer pig for the first quarter from the valley

furnaces. It is understood that negotiations are pending, however."

"During the past week the pig-iron markets have hardened further. As much as \$17.50 has been paid for a lot of 3000 tons of Bessemer to a valley furnace to go to an Ohio river steel plant. The demand from steelmakers has made malleable Bessemer very scarce, and the foundries which need this grade are facing a troublesome situation. Some business has been done in Eastern Pennsylvania in basic pig at \$17.50 delivered, and it looks as though there may be a shortage during the winter. A Western steel plant has bought 14,000 tons of basic pig, of which 6000 tons went to Southern producers and the balance to Northern furnaces."

"It is understood that early last week the cast-iron-pipe interests purchased 20,000 tons of pig-iron, and that further considerable quantities are wanted, although buyers seem to shy at present prices. So far as Southern makers are concerned, the largest are demanding \$14.50 for No. 2 at Birmingham, but there is still standard iron available at \$14. The Lake Superior charcoal producers have put up prices \$1 per ton to \$18 at furnaces.

"Contracts for steel rails closed during the week foot up tonnage in excess of 100,000 tons. This includes 25,000 tons for the Boston & Maine, 25,000 tons additional for the Harriman lines, making the total for that interest close to 170,000 tons; 12,500 tons for the Minneapolis, St. Paul & Sault Ste. Marie, 10,000 tons for the Pacific & Idaho Northern and 9000 tons for the Yosemite Valley.

"The report that a Spanish mill had captured business on the Pacific coast is denied. It probably grew out of the fact that three months ago the Altos Hornos de Viscaya of Bilbao did take a contract for 11,000 tons of steel rails for shipment to Mexico.

"The plate mills are swamped with orders, among the latest being the material for an additional Lake boat, captured by Chicago. It is possible that prices will be moderately advanced this week.

"The pressure for structural material continues unabated, but the new tonnage being placed is moderate. Among the business coming up is 8000 tons for an extension of the Northwestern Elevated in Chicago.

"In castings a very big order has just been awarded by the builders of the McAdoo tunnel. The quantity involved is about 40,000 tons, which is a little over one-half of the requirements.

"Bids for 7800 tons of cast-iron pipe were opened in this city this week, but the contract is not yet awarded. Next week is to bring the letting of 30,000 tons for this city and 7000 tons for Providence.

"The troubles in Russia have had a sharp effect upon the price of ferro-manganese, which has been jumping lately. The usual supply of high-grade low-phosphorus ores from the south of Russia, which has been hampered for some time past, is now seriously threatened."

Building contractors in New Orleans are concerned about a shortage in the supply of lime.

#### The "Winter Excursion Book"

Just issued by the Passenger Department of the Pennsylvania Railroad Co. is one of the finest resort books ever gotten out by any railroad company. It is a comprehensive manual of the leading winter resorts of the entire United States, containing 168 pages of interesting reading matter, and profusely illustrated with half-tone engravings. One may obtain full information in reference to wintering places, routes and rates thereto. The book is bound in an artistic cover, chaste in design and harmonious in color. This valuable work may be obtained free of charge at the principal ticket offices of the Pennsylvania Railroad Co., or will be sent postpaid upon application to Geo. W. Boyd, general passenger agent, Broad Street Station, Philadelphia.

"There is no truth in the report given wide currency that the Steel Corporation had purchased 50,000 tons of Bessemer pig for the first quarter from the valley

## FINANCIAL NEWS

The MANUFACTURERS' RECORD invites information about Southern financial matters, items of news about new institutions, dividends declared, securities to be issued, openings for new banks, and general discussions of financial subjects bearing upon Southern matters.

#### Review of the Baltimore Market.

Office MANUFACTURERS' RECORD,

Baltimore, Md., November 15.

There was little of interest in the Baltimore stock market during the past week. Business was generally quiet, and prices moved within narrow limits.

In the dealings United Railways incomes sold from 66 1/4 to 65 1/2; the trust certificates from 65 1/2 to 66, and the 4s from 92 1/2 to 92. Consolidated Gas was dealt in at 88; the 6s at 109 1/4 to 109, and the 4 1/2s at 100 1/2. Seaboard common sold at 27 1/4 to 30; the new common from 27 to 28 1/4; the preferred at 51 to 50; the new second preferred from 57 1/4 to 58 1/2; the 4s from 89 1/4 to 90; the 10-year 5s at 102 1/2 to 102 1/4; Cotton Duck 5s at 81 1/2 to 81 1/4; G. B. & S. common from 8 1/2 to 8 3/4; the incomes at 32 1/2, and the 1sts from 61 to 60.

Maryland National Bank shares sold at 22 1/2; Marine Bank at 37 1/2; Bank of Baltimore at 118; Citizens' at 28 1/2, and Third National at 130.

International Trust ranged from 143 1/2 to 143; Mercantile Trust sold at 145; Fidelity & Deposit, 145 to 147; United States Fidelity & Guaranty, 130 to 133 1/2; Maryland Casualty, 57 1/4; Colonial Trust, 30 1/4; Continental, 195.

Other securities were traded in as follows: Atlantic Coast Line Consolidated 4s, 101 1/2 to 101 1/4; do. new 4s, certificates, 94; Houston Oil common, 6 to 6 1/2; Central Railway (Baltimore) 5s, 116 1/2; Georgia & Alabama Consolidated 5s, 112 1/4 to 112 1/2; Virginia Midland 2ds, 110 1/4 to 110 1/2; Baltimore City 3 1/2s, 1922, 106 1/4; Baltimore Traction 1st 5s, 1929, 116; Baltimore Traction Conv. 5s, 1906, 99 1/2 to 100 1/2; Central Ry. Co. 5s (Balto.), 1932, 116 1/2 to 116; Charleston Con. Electric 5s, 1999, 96; City & Suburban 5s (Balto.), 1922, 114 1/2 to 115 1/2; City & Suburban 5s (Wash.), 1948, 106; Lexington Railway 1st 5s, 1949, 105 1/2 to 106; Macon Ry. & Lt. 1st Con. 5s, 1953, 100; Newport News & Old Pt. 5s, 1938, 96; Norfolk Railway & Light 5s, 95 1/2 to 96; United Railways 1st 4s, 1949, 92 1/2 to 93; United Railways Inc. 4s, 1949, 65 1/2 to 67 1/2.

**Miscellaneous Stocks.**

Alabama Consol. Coal & Iron 5s, 1949, 105 1/2 to 106 1/2
Augusta Ry. & Elec. 5s, 1940, 104 1/2 to 105
Baltimore Gaslight 1st 5s, 1947, 102
Consolidated Gas 6s, 1910, 108 1/2 to 109 1/2
Consolidated Gas 6s, 1939, 115 1/2 to 116
Consolidated Gas 1/2s, Cts., 1904, 100 1/2 to 100 1/4
G. B. & S. Brewing 1st 3-4s, 60
G. B. & S. Brewing 2d Incomes, 33
Maryland Steel 5s, 102 1/2 to 103 1/2
Mt. V. & Woodly Cot. Duck 5s, 81 1/2 to 82
United Elec. Light & Power 4 1/2s, 96

#### Street Railway Bonds.

Alabama Consol. Coal & Iron 5s, 1949, 105 1/2 to 106 1/2

Augusta Ry. & Elec. 5s, 1940, 104 1/2 to 105

Baltimore Gaslight 1st 5s, 1947, 102

Baltimore Traction 1st 5s, 1929, 116

Baltimore Traction Conv. 5s, 1906, 99 1/2 to 100 1/2

Central Ry. Co. 5s (Balto.), 1932, 116 1/2 to 116

Charleston Con. Electric 5s, 1999, 96

City & Suburban 5s (Balto.), 1922, 114 1/2 to 115 1/2

City & Suburban 5s (Wash.), 1948, 106

Lexington Railway 1st 5s, 1949, 105 1/2 to 106

Macon Ry. & Lt. 1st Con. 5s, 1953, 100

Newport News & Old Pt. 5s, 1938, 96

Norfolk Railway & Light 5s, 95 1/2 to 96

United Railways 1st 4s, 1949, 92 1/2 to 93

United Railways Inc. 4s, 1949, 65 1/2 to 67 1/2

**Miscellaneous Bonds.**

Alabama Consol. Coal & Iron 5s, 1949, 105 1/2 to 106 1/2

Atlanta Gaslight 1st 5s, 1947, 102

Consolidated Gas 6s, 1910, 108 1/2 to 109 1/2

Consolidated Gas 5s, 1939, 115 1/2 to 116

Consolidated Gas 1/2s, Cts., 1904, 100 1/2 to 100 1/4

G. B. & S. Brewing 1st 3-4s, 60

G. B. & S. Brewing 2d Incomes, 33

Maryland Steel 5s, 102 1/2 to 103 1/2

Mt. V. & Woodly Cot. Duck 5s, 81 1/2 to 82

United Elec. Light & Power 4 1/2s, 96

**SOUTHERN COTTON-MILL STOCKS**

#### Quotations Furnished by Hugh MacRae & Co., Wilmington, N. C., for Week Ending November 11.

Bid. Asked.

Abbeville Cotton Mills (S. C.) 88 1/2 92

Aiken Mfg. Co. (S. C.) 84 91

Anderson Cotton Mills (S. C.) 103 104

Arkwright Mills (S. C.) 115 119

Augusta Factory (Ga.) 79 86

Avondale Mills (Ala.) 94

Bolton Mills (S. C.) 106 109

Bibb Mfg. Co. (Ga.) 101

Brandon Mills (S. C.) 101 104

Cabarrus Cotton Mills (N. C.) 136 137

Chadwick Mfg. Co. (N. C.) Pfd. 102

Chiquila Mfg. Co. (N. C.) 81

Clifton Mfg. Co. (S. C.) 103 107

Clifton Mfg. Co. (S. C.) Pfd. 101 105

Clinton Cotton Mills (S. C.) 146

Columbus Mfg. Co. (Ga.) 92 95

Courtenay Mfg. Co. (S. C.) 100 101

Dallas Mfg. Co. (Ala.) 82 85

Darlington Mfg. Co. (S. C.) 60 76

Eagle & Phenix Mills (Ga.) 119

Easley Cotton Mills (S. C.) 124 126

Enoree Mfg. Co. (S. C.) 85

Enoree Mfg. Co. (S. C.) Pfd. 99 102

Enterprise Mfg. Co. (Ga.) 79 85

Exposition Cotton Mills (Ga.) 175 200

Gaffney Mfg. Co. (S. C.) 64 67 1/2

Gainesville Cotton Mills (Ga.) 25

Granby Cot. Mills (S. C.) 1st Pfd. 50 66

Granville Mfg. Co. (Ga.) 159 165

Greenwood Cotton Mills (S. C.) 96 100

Grendell Mills (S. C.) 106

Henrietta Mills (N. C.) 200

King Mfg. Co. J. P. (Ga.) 97 103

Lancaster Cotton Mills (S. C.) 104 106

Lancaster Cot. Mills (S. C.) Pfd. 97 98 1/2

Langley Mfg. Co. (S. C.) 53 56

Laurens Mfg. Co. (S. C.) 161

Limestone Mills (S. C.) 96 101

Lockhart Mills (S. C.) 94

Lockhart Mills (S. C.) Pfd. 102

Louise Mills (N. C.) 94

Louise Mills (N. C.) Pfd. 102

Marlboro Cotton Mills (S. C.) 66 76

Mayo Mills (N. C.) 150 200

Mills Mfg. Co. (S. C.) Pfd. 98 101

Monaghan Mills (S. C.) 100 104

Monarch Cotton Mills (S. C.) 78 80

Newberry Cotton Mills (S. C.) 116

Norris Cotton Mills (S. C.) 100 102

Odell Mfg. Co. (N. C.) 88 82

Orangeburg Mfg. Co. (S. C.) 79 97

Orr Cotton Mills (S. C.) 105 106

Pacoret Mfg. Co. (S. C.) 154 154

Pacoret Mfg. Co. (S. C.) Pfd. 102 104

Pelzer Mfg. Co. (S. C.) 170

Piedmont Mfg. Co. (S. C.) 175

Poe Mfg. Co. F. W. (S. C.) 126 130

Raleigh Cotton Mills (N. C.) 100

Richland Cot. Mills (S. C.) Pfd. 50

Robert  
Sax  
Sib  
Sou  
Span  
Spr  
Tri  
Vic  
Wa  
Wa  
Wa  
Whi  
Wis  
Wood  
Qu  
G  
Abi  
Aet  
Alik  
Ame  
And  
Arc  
Ark  
Aug  
Avol  
Belt  
Bib  
Bra  
Bro  
Cab  
Chas  
Chi  
Clif  
Clin  
Colu  
Court  
Dall  
Dar  
D. E  
Eag  
East  
Enon  
Ente  
Expo  
Gaff  
Gain  
Glen  
Gluc  
Gran  
Gree  
Gren  
Hart  
Henn  
Inne  
King  
Lane  
Lane  
Lang  
Laur  
Lime  
Lock  
Lora  
Louis  
Louis  
Marl  
Mayo  
Mills  
Mills  
Mollo  
Mon  
Mon  
Nona  
New  
Ninet  
Nin  
Norri  
Odel  
Oran  
Orr  
Pacol  
Pacol  
Pelz  
Pied  
Pied  
Poe  
Poe  
Rale  
Richl  
Rohan  
Roxon  
Saxon  
Sibley  
South  
Spart  
Spring  
Tric  
Tucap  
Victor  
Warre  
Warre  
Wash  
Wash  
Whit  
Wisc  
Wood  
The  
Co. fo  
1905,  
ment  
It sh  
to \$1,  
\$200,  
the p  
was le  
prefer  
\$611,9  
amoun  
plus o  
The  
this sh  
condit  
cotton  
also s  
suppl  
conseq  
cotton  
The  
Co. is  
amoun

Roanoke Cotton Mills (N. C.)	124
Saxon Mills (S. C.)	100
Sibley Mfg. Co. (Ga.)	59
Southern Cotton Mills (N. C.)	80
Spartan Mills (S. C.)	137
Springstein Mills (S. C.)	100
Trion Mfg. Co. (Ga.)	131
Tucapau Mills (S. C.)	128
Victor Mfg. Co. (S. C.)	109
Warren Mfg. Co. (S. C.)	98
Warren Mfg. Co. (S. C.) Pfd.	105
Washington Mills (Va.)	17
Washington Mills (Va.) Pfd.	93
Whitney Mfg. Co. (S. C.)	120
Wiscasset Mills (N. C.)	119
Woodruff Cotton Mills (S. C.)	99%

**Quotations Furnished by William S. Glenn, Broker, Spartanburg, S. C., for Week Ending November 11.**

Bid Asked.

Abbeville Cotton Mills (S. C.)	89	93
Aetna Cotton Mills (S. C.) Pfd.	70	70
Aiken Mfg. Co. (S. C.)	85	91
American Spinning Co. (S. C.)	108	108
Anderson Cotton Mills (S. C.)	103	106
Arcaida Mills (S. C.)	83	87
Arkwright Cotton Mills (S. C.)	112	118
Augusta Factory (Ga.)	80	85
Avondale Mills (Ala.)	95	100
Bolton Mills (S. C.)	105	108
Brandon Mills (S. C.)	102	105
Brogan Mills (S. C.)	95	95
Cabarrus Cotton Mills (N. C.)	137	137
Chadwick Mfg. Co. (N. C.) Pfd.	103	103
Chiquita Mfg. Co. (S. C.)	90	90
Clifton Mfg. Co. (S. C.)	109	115
Clifton Mfg. Co. (S. C.) Pfd.	103	103
Clinton Cotton Mills (S. C.)	145	145
Columbus Mfg. Co. (Ga.)	92	95
Courtenay Mfg. Co. (S. C.)	100	103
Dallas Mfg. Co. (Ala.)	85	85
Darlington Mfg. Co. (S. C.)	60	62
D. E. Converse Co. (S. C.)	115	115
Eagle & Phenix Mills (Ga.)	120	120
Easley Cotton Mills (S. C.)	124	127
Enoree Mfg. Co. (S. C.)	87	87
Enterprise Mfg. Co. (Ga.)	70	85
Exposition Cotton Mills (Ga.)	174	201
Gaffney Mfg. Co. (S. C.)	63	66
Galvinesville Cotton Mills (Ga.)	66	20
Glenwood Cotton Mills (S. C.)	98	98
Gluck Mills (S. C.)	97	97
Granby Cot. Mills (S. C.) 1st Pfd.	50	50
Graniteville Mfg. Co. (S. C.)	160	160
Greenwood Cotton Mills (S. C.)	95	100
Grendel Mills (S. C.)	105	105
Hartsville Cotton Mills (S. C.)	92	92
Henriette Mills (N. C.)	90	90
King Mfg. Co. J. P. (Ga.)	97	103
Lancaster Cotton Mills (S. C.)	106	97
Langley Mfg. Co. (S. C.)	92	96
Laurens Mills (S. C.)	157	157
Limestone Mills (S. C.)	98	98
Lockhart Mills (S. C.)	95	98
Lockhart Mills (S. C.) Pfd.	101	101
Loray Cotton Mills (N. C.) Pfd.	79	79
Louise Mills (N. C.)	94	94
Louise Mills (N. C.) Pfd.	102	102
Marlboro Cotton Mills (S. C.)	67	75
Mayo Mills (N. C.)	150	200
Mills Mfg. Co. (S. C.)	97	97
Mills Mfg. Co. (S. C.) Pfd.	99	101
Monlohon Mfg. Co. (S. C.)	77	77
Monaghan Mills (S. C.)	100	104
Monarch Cotton Mills (S. C.)	78	81
Newberry Cotton Mills (S. C.)	115	115
Ninety-Six Cotton Mills (S. C.)	90	90
Norris Cotton Mills (S. C.)	100	103
Odell Mfg. Co. (N. C.)	90	90
Orangeburg Mfg. Co. (S. C.) Pfd.	80	80
Orr Cotton Mills (S. C.)	105	105
Pacolet Mfg. Co. (S. C.)	155	155
Pacolet Mfg. Co. (S. C.) Pfd.	102	102
Pelzer Mfg. Co. (S. C.)	170	170
Piedmont Mfg. Co. (S. C.)	170	170
Poe Mfg. Co. F. W. (S. C.)	125	130
Raleigh Cotton Mills (N. C.)	100	100
Richland Cot. Mills (S. C.) Pfd.	50	50
Roanoke Mills (N. C.)	120	120
Saxon Mills (S. C.)	101	102
Sibley Mfg. Co. (Ga.)	60	60
Southern Cotton Mills (N. C.)	80	80
Spartan Mills (S. C.)	137	137
Springstein Mills (S. C.)	100	100
Trion Mfg. Co. (Ga.)	132	140
Tucapau Mills (S. C.)	140	140
Victor Mfg. Co. (S. C.)	110	113
Warren Mfg. Co. (S. C.)	96	96
Warren Mfg. Co. (S. C.) Pfd.	105	105
Washington Mills (Va.)	17	20
Washington Mills (Va.) Pfd.	93	96
Whitney Mfg. Co. (S. C.)	120	120
Wiscasset Mills (N. C.)	119	125
Woodruff Cotton Mills (S. C.)	100	104

**American Cotton Oil Report.**

The report of the American Cotton Oil Co. for the fiscal year ended August 31, 1905, must be a very satisfactory document to stockholders of the corporation. It shows profits for the year amounting to \$1,180,382, an increase of more than \$200,000 as compared with 1904. After the payment of interest on bonds there was left \$1,015,382, out of which was paid preferred stock dividends amounting to \$611,916 and the common stock dividend, amounting to \$202,371, leaving a net surplus of \$201,065.

The company has been able to make this showing notwithstanding unfavorable conditions in the way of high prices for cottonseed and a short cotton crop, and also strong competition and a plentiful supply of lard, with cheap prices, and consequently temporarily less demand for cotton-oil products.

The capital of the American Cotton Oil Co. is \$34,799,400. All the common stock, amounting to \$20,237,100, is outstanding,

and the preferred stock amounts to \$14,562,300, but only \$10,198,600 is outstanding. The bonds are \$3,000,000 of 4½ per cent. debentures.

**Bank Reports.**

The First National Bank of Gastonia, N. C., reports at close of business November 9, 1905, loans and discounts, \$493,521; total cash, \$140,660; capital \$100,000; surplus, \$12,500; undivided profits, \$11,929; total deposits, \$501,438; total resources, \$778,986. The officers are L. L. Jenkins, president; R. R. Ray, vice-president; S. N. Boyce, cashier; M. T. Wilson, assistant cashier, and L. C. Pegram, teller.

The Georgia Railroad Bank of Augusta, Ga., reports at the close of business November 10, 1905, loans and discounts, \$2,362,083; due from banks, \$502,769; cash and cash items, \$585,315; capital, \$200,000; undivided profits, \$327,744; due depositors, \$2,641,247; total resources, \$3,565,884. The officers are Jacob Phinizy, president; Wm. A. Latimer, vice-president; Charles G. Goodrich, cashier, and Rufus H. Brown, assistant cashier.

**A Trust-Company Deal.**

A deal has been practically closed for the purchase of the Central Trust Co. of Baltimore by the Baltimore Trust & Guarantee Co. at \$70 per share, the par being \$50. Central Trust stock amounts to 6000 shares, and it is announced that more than 95 per cent. has been delivered. The total assets are over \$940,000. The officers of the Central Trust Co. are Clarendon I. T. Gould, president; H. H. Hubner, vice-president; Harry L. Benson, secretary and treasurer; J. L. Blackwell, Nicholas P. Bond, Thomas E. Bond, David E. Evans, C. I. T. Gould, John Hubner, Henry H. Hubner, James E. Ingram, Henry A. Parr, William Schwarz, John T. Stone, John Waters, George R. Webb, George R. Willis, all of Baltimore; E. R. L. Gould of New York and Robert C. Hall of Pittsburg, directors. Mr. B. N. Baker is president of the Baltimore Trust & Guarantee Co.

**The Bankers' Encyclopedia.**

The Bankers' Encyclopedia, edition of September, 1905, published by the Bankers' Encyclopedia Company, 1402-77 East Jackson Boulevard, Chicago, displays the continued excellence and progress maintained by this valuable reference-book. It is, as its title page declares, a new and original compilation covering the banks, bankers, savings banks and loan and trust companies of the United States and Canada. It gives full statements of their liabilities and resources, names of officers, reserve agents and correspondents, besides other valuable information relating to banking interests, attorneys and business men generally. It has more than 1100 pages, is furnished with a convenient thumb index, and is handsomely bound in blue cloth with gilt lettering.

**New Corporations.**

It is reported that the Union Trust Co., with \$10,000,000 capital, is to be organized at Tulsa, I. T., by Missouri capitalists.

The Citizens' Bank & Trust Co., capital \$100,000, has been organized at Austin, Texas, with Gen. William R. Hamby as president.

It is reported that B. P. Jones, Frank Roberts, C. L. Jones and others will organize a new bank at Valdosta, Ga., to have \$250,000 capital.

The Blackburn Brothers Abstract Co. of Amarillo, Texas, capital \$10,000, has been incorporated by W. P. Blackburn, J. L. Penry and A. S. Blackburn.

The Jackson County Bank is reported to have begun business at Sylva, N. C., with \$12,000 capital. C. J. Harris is president, and M. Buchanan, cashier.

The Citizens' Bank of Bunkie, La., capital \$25,000, has begun business with J. T. Johnson, president; G. W. Sentell, vice-president, and H. E. Owen, cashier.

The Citizens' Bank of Graham, N. C., capital \$10,000, has been incorporated by J. C. Simmons, W. F. Blackman, W. H. Holt, W. S. Vestal and J. M. McCracken. It is reported that J. M. Langston, Jr., and Mr. Waller of the Southern Trust Co. of Fort Smith, Ark., are organizing a bank at Booneville, Ark., to have \$50,000 capital.

The First National Bank of Haynesville, Ala., has been authorized to begin business with \$25,000 capital. W. P. Russell is president, and G. E. McGehee, cashier.

The Jefferson-Gravois Trust Co. has been incorporated at St. Louis, Mo., with \$100,000 capital, by W. J. Lewis, J. C. Settle, A. L. Crandall, M. A. Seward and S. H. Long.

The Canyon National Bank of Canyon, Texas, capital \$25,000, has been authorized to begin business with R. W. O'Keefe, president; J. I. Campbell, vice-president; L. H. Hunt, cashier.

The Brokerage Securities Co. of Lawton and Muskogee, I. T., capital \$50,000, has been granted a charter. The incorporators are A. E. C. B. and H. C. Hammonds, all of Lawton.

A new brokerage firm has been incorporated at Houston, Texas, with \$10,000 capital. The firm is composed of Messrs. T. H. Thompson, Ben Campbell and John E. Davis, all of Houston.

The Masonic Trust Co. of Bluefield, W. Va., has been incorporated with \$25,000 capital by F. J. Brown, F. L. Black, A. S. Booker, F. S. Easley, R. W. Cubbedge, W. E. Pearson, D. M. Easley.

The McConnell Investment Co. of Pratt City, Ala., capital \$2000, has been incorporated by F. C. Cargyle, president and treasurer; C. D. Ritter, vice-president; H. E. Whitaker, secretary.

A new bank has been established at Barwick, Ga., with \$25,000 capital. The directors are M. E. Hope, president; John Massey, vice-president; R. T. Redfern, J. A. Barrow and H. C. Davis.

The Bank of Coolidge at Coolidge, Ga., capital \$25,000, has been granted a charter. The incorporators are W. H. Crow, J. W. Ingram, W. A. J. Passamore and W. A. Burtle, all of Coolidge.

The Citizens' Bank of Blackshear, Ga., capital \$25,000, has been granted a charter. The incorporators are A. B. Estes, J. O. Ward, W. P. Williams and A. J. Strickland, all of Pierce county.

The Bank of West Baton Rouge has begun business at Port Allen, La., with \$25,000 capital. The officers are A. V. Dubroca, president; Henry Cohn, Jr., vice-president, and William Bernard, secretary.

The First National Bank of Knox City, Texas, has been authorized to begin business with \$25,000 capital. The officers are J. L. Jones, president; W. M. Sandifer, vice-president, and C. A. Benedict, cashier.

The Columbia Trust Co. recently organized at Oklahoma City, O. T., by Oklahoma and Cincinnati capitalists, has been granted a charter. Caleb R. Brooks will be president, and W. E. Hodge, secretary.

The Washington Safe Deposit Co. has been incorporated at Alexandria, Va., with \$120,000 capital. The officers are: W. H. Gordon, president; W. H. Hoecke, vice-president; Samuel Cross, secretary, Washington.

Application for a charter has been made by the Merchants & Farmers' Trust Co. of Lexington, N. C. The company will

have \$25,000 capital, and the incorporators are J. W. Noell, R. L. Burkhead and Wade H. Phillips.

The First National Bank of Fairfax, O. T., has been authorized to begin business with \$25,000 capital. The officers are L. A. Wismeyer, president; J. M. Moody and Charles Pasche, vice-president, and R. H. Hoss, cashier.

The Union Savings & Trust Co. of Mena, Ark., capital \$5000, has been granted a charter. The officers are Eugene Cox, president; George Legate, vice-president; S. H. Allen, secretary, and E. W. Hutchinson, treasurer.

Articles of incorporation for the Southern Mutual Life Insurance Co., with headquarters at Little Rock, Ark., capital \$100,000, have been filed by J. Fleetwood Butts, Edward M. Pemberton M. K. Pemberton and Nat Hoggate. The officers of the Citizens' Bank, which recently opened for business at Fitzgerald, Ga., with \$25,000 capital, are: Hon. Drew W. Paulk, mayor of Fitzgerald, E. W. Jordan, J. E. Johnson, W. R. Beach and W. H. Wood, all well-known business men of Washington county.

The Farmers and Merchants' Bank of Georgetown, Ga., capital \$25,000, has been granted a charter. The incorporators are J. S. Lewis of Vermont, L. G. Branham, J. T. Gibson, S. H. Barrett, H. M. Kaibler and I. L. Balkcom, all of Quitman county.

A new bank has been organized at Hernimanville, Miss., with \$25,000 capital by Major R. W. Millsaps of Jackson, Hon. D. H. Mounier of Port Gibson, J. D. Millsaps, Dr. E. H. Jones, S. E. Dudley, W. F. Gordon and W. L. Short of Hernimanville.

The Atlanta Industrial Life Insurance Co. of Atlanta, Ga., capital \$100,000, has been incorporated with \$100,000 capital. The petitioners are John N. McEachern, I. M. Sheffield, R. H. Dobbs and Pulus Covington, all of Fulton county, and S. C. McEachern of Floyd county, Georgia.

The Thurmond Brothers Bank of Sayre, O. T., is reported to have been changed to the First National Bank of Sayre, with \$25,000 capital. I. C. Thurmond is president; E. K. Thurmond, vice-president; O. H. Thurmond, cashier, and Ernest Beatty, assistant cashier.

The directors of the bank at Cross Hill, S. C., are W. C. Rason, president; Dr. J. H. Miller, vice-president; E. Barmore Rason, Jr., cashier; M. A. Leaman, A. M. Hill, S. H. Goggans and P. N. Boozer, and business is expected to begin January 1 with \$25,000 capital.

The Bank of Powhatan, capital \$2500 to \$25,000, has been incorporated, with principal office at Powhatan, Va. The officers are J. W. Kidwell, president, Buckingham; D. A. Fawcett, vice-president, Webster Springs, W. Va.; J. H. Kidwell, cashier, Buckingham.

The Guarantee Life Insurance Co. of Houston, Texas, capital \$100,000, has been incorporated by Jonathan Lane, John H. Thompson, J. F. Wolters, A. P. Root, W. D. Cleveland, H. M. Garwood, Hyman Levy, B. L. Vineyard, J. S. Rice, T. W. House of Houston and others.

The Bank of Jamestown has begun business at Jamestown, Tenn., with \$20,000 capital. The officers are William Cooper of Mayland, president; W. J. Gaudin of Jamestown, first vice-president; W. Wood of Jamestown, second vice-president, and I. N. Odom of Lebanon, cashier.

The Citizens' State Bank of Kingfisher, O. T., to take the place of the Farmers' National Bank, has been chartered with

\$15,000 capital. The incorporators are J. M. Worl, E. M. Worl and George M. Bowman of Kingfisher, W. R. Kimerer of Dover, and A. Heilman of Denver, Col.

The Ringgold State Bank of Ringgold, Texas, recently organized with \$15,000 capital, has been granted a charter. The directors are Henry D. Lindsley of Dallas, J. T. Harris of Fort Worth, E. E. Carlton, C. L. Purviance, C. C. Hughes, D. A. Stephenson, G. P. Wheeler of Ringgold.

A new bank has been organized at Panama, I. T., by R. L. Garrett and others of Dallas, Texas, and is now doing business with \$25,000 capital. The officers are W. T. Dunbar, president; A. J. Kline, vice-president; R. L. Garrett, cashier, and Dr. Nicholson of Panama, I. T., assistant cashier.

The First National Bank of Holland, Texas, recently approved, has elected the following officers: L. B. Mewhinney, president; C. B. Stork, vice-president; R. H. Underwood, cashier; S. H. Barton, E. B. Baily, L. B. Mewhinney, J. P. Murroh, C. B. Stork and R. H. Underwood of Holland, and F. F. Downs of Temple.

The Denison Bank & Trust Co. of Denison, Texas, has filed its charter; capital \$100,000. The directors are J. B. McDougall, H. Brooks, W. S. Hubbard, Franz Kohfeldt, R. D. Beirne, W. B. Munson, F. W. Howe, J. R. Haven, C. C. McCarty, L. Wertz, S. P. Aucker, F. A. Ungles and R. C. Foster, Jr., all of Denison.

The Rankin County Bank of Brandon, Miss., capital \$15,000, has elected the following directors: H. A. Busick, president; W. B. Collier, vice-president; M. E. Ward, cashier, and William Buchanan, attorney; J. N. B. Berry, G. W. White, Lon Barrow, Dr. Ben Wilson and Dr. Carter, president of the First National Bank of Jackson.

The First Bank of Griffithville, Ark., capital \$7500, has filed articles of incorporation. The incorporators are A. J. Smith, president; James A. Neaville, vice-president; W. J. Miller, secretary and cashier; J. H. Davis, Wiley McKinnon, Oscar D. Pence, Geo. W. Pence, J. A. Rener, L. S. Birdwell, W. L. Carter, G. W. Morrow, W. F. Rener, J. F. Baxter and R. C. Bryant.

The Bank of Paint Rock has been organized at Paint Rock, Ala., with \$10,000 capital, among the stockholders being Butler, Rousseau & Co. of Paint Rock, Capt. James P. Williams of Trenton, Ala., and others. It is expected that business will begin about December 1 with Col. M. A. Clay of Princeton as president, and Judge William B. Bridges of Scottsboro, cashier.

The Organizing & Financing Co. of Raleigh, N. C., has been chartered with \$225,000 capital. The incorporators are Chas. Root, Jessie G. Ball, Chas. J. Parker, F. K. Ellington, A. W. Goodwin, Robert Strong, Norman H. Johnson, W. H. Williamson, Chas. E. Johnson, Joseph E. Pogue and M. T. Leach of Raleigh, Chas. B. Aycock and H. C. Smith of Goldsboro, and W. H. Hunt of Oxford.

The Central Bank & Trust Co. of Memphis, Tenn., capital \$250,000, has been granted a charter. The organizers are N. C. Perkins, J. F. Mathis, J. C. Ottinger, W. W. Farris, B. B. Beecher, R. D. Goodwyn, John Marbury, J. W. Canada, L. B. McFarland, W. F. Taylor, Cleland K. Smith, H. M. Neely, Jr., W. M. Ball, J. T. Morton, J. C. Norfleet, H. C. McKellar, E. L. Smith, Levi Joy and I. D. Block.

The Sumner County Bank & Trust Co. of Gallatin, Tenn., proposes to begin business November 18 with the following officers: W. G. Schamberger, president; Geo. E. Seay, vice-president; C. B. Brown,

cashier; W. F. Brown, assistant cashier; directors, I. M. Baker, S. P. Jamison, Luther Dorris, E. S. Gardner, R. T. Ramsey, H. H. Donoho, W. G. Schamberger, George E. Seay, C. B. Brown, W. F. Brown and M. A. Ewing.

#### New Securities.

Andrews, N. C.—The MANUFACTURERS' RECORD is informed that Andrews school district has been authorized to issue \$5000 of school building bonds, to be issued January 1. Bids will be received and any additional information will be given by J. Q. Barker, chairman of the board of trustees.

Baltimore, Md.—Bids will be received by Wilton Snowden, president board of commissioners of finance, until noon November 22 for the \$3,000,000 of 3½ per cent. 50-year dock-loan stock. Other sales of city stock will be made in January to the amount of \$2,500,000, covering \$1,000,000 for sewers, \$1,000,000 for parks and \$500,000 for improvements in the Annex district. This makes a total of \$5,500,000 provided by the ordinance of estimates for 1906, recently approved by the mayor.

Biloxi, Miss.—Messrs. Kleybolt & Co. of Cincinnati has purchased at \$10,110.50 the \$10,000 of 5 per cent. water-works and fire-alarm bonds.

Biloxi, Miss.—On December 5 an election is to be held to vote on the question of issuing an additional \$15,000 of water-works bonds.

Chimney Rock, N. C.—The election to decide the question of issuing township bonds has been postponed until December 16.

Covington, Ky.—The People's Savings Bank & Trust Co. of Covington has been awarded at 106 and interest the \$5900 of 6 per cent. street-improvement bonds.

Dallas, Texas.—The commissioners' court has authorized the issuing of \$75,000 of 4 per cent. Dallas county refunding courthouse bonds.

Dawson, Ga.—The \$45,000 of water-works bonds have been purchased at \$47,550 by the Robinson-Humphrey Company of Atlanta.

Edgewood, W. Va.—Bids will be received at the office of the Security Trust Co. in Wheeling until 10 A. M. December 2 for \$17,000 of Edgewood bonds.

El Paso, Texas.—The attorney-general has approved \$125,000 of 5 per cent. 30-year improvement district bonds.

Gainesborough, Tenn.—The \$6000 of 5 per cent. 10-20-year schoolhouse bonds have been purchased by Albert Kleybolte & Co. of Cincinnati at 100.75.

Gaston, N. C.—The First National Bank of Gaston has purchased at par \$100,000 of the \$300,000 4 per cent. 30-year Gaston county road improvement bonds.

Grand Saline, Texas.—The attorney-general has approved for registration \$14,500 of 5 per cent. 10-40-year water-works bonds. These bonds were recently purchased by the Trust Company of Dallas at a premium.

Hazlehurst, Miss.—The \$50,000 of 4½ per cent. Copiah county bonds have been purchased by F. R. Fulton & Co. of Chicago at par.

Hempill, Texas.—Mr. J. A. Watson, clerk Sabine County Court, informs the MANUFACTURERS' RECORD that the city has voted to issue \$30,000 of courthouse bonds.

Huntington, W. Va.—The city recently voted in favor of issuing \$55,000 of street and \$45,000 of sewer 5 per cent. 20-30-year bonds.

Independence, Mo.—The Independence Home Telephone Co. has filed a mortgage deed of trust with the Pioneer Trust Co. of Kansas City to secure an issue of \$150,000 of 5 per cent. 20-year bonds. Theor-

dore Gary of Macon, Mo., is president of the telephone company.

Jackson, Miss.—The city has been granted authority by the legislature to issue \$250,000 of 5 per cent. 10-20-year bonds in order to gain control of the water-works.

Lexington, Ky.—The MANUFACTURERS' RECORD is informed by Mayor Thomas A. Combs that the city has voted to issue \$27,000 of 4 per cent. 40-year viaduct bonds, and that he will receive bids for same until noon November 27.

Lexington, Mo.—Bids will be received by the board of education, T. J. Bandon, secretary, until 7:30 P. M. November 22 for \$15,000 of 4 per cent. 15-20-year Lexington school district bonds.

Marion, N. C.—An issue of \$30,000 of 5 per cent. 30-year water and sewer bonds has been sold at par.

Meridian, Miss.—The proposed \$100,000 of good roads bonds were defeated at the recent election.

New Albany, Miss.—It is rumored that in December probably \$12,000 of light and street bonds will be issued.

Palestine, Texas.—The city has voted to issue \$20,000 of 4½ per cent. 10-40-year schoolhouse bonds.

Poors Ford, N. C.—An election is soon to be held to decide the question of issuing \$17,000 of bonds in aid of the proposed electric railroad.

Rockmart, Ga.—The city has voted to issue \$6000 of 5 per cent. electric-light and power bonds. M. P. Lane is mayor.

San Marcos, Texas.—The city has voted to issue \$8000 of school-building and \$3000 of street-improvement bonds.

Stratham, Ga.—The city has voted in favor of issuing \$8000 of 6 per cent. 10-30-year schoolhouse bonds, and bids for same will be received at any time.

Tifton, Ga.—The city has voted to issue \$50,000 of 30-year school and water bonds.

Warrenton, Ga.—The MANUFACTURERS' RECORD is informed by S. E. DuPuix, manager of the Warrenton Oil Mill, that the city has voted to issue \$15,000 of school-building bonds. Address C. R. Fitzpatrick and W. C. English, Sr.

Weatherford, Texas.—The city council has canceled the \$25,000 of 4 per cent. sewerage bonds and ordered an election to be held December 6 for \$25,000 of 5 per cent. sewerage bonds.

Wheeling, W. Va.—The Virginia Oil & Gas Co. is reported to have sold to local capitalists \$150,000 of its \$250,000 6 per cent. 30-year bonds.

#### Financial Notes.

The Citizens' Bank of Shelbyville, Ky., has decided to increase its capital from \$100,000 to \$150,000.

It is reported that A. H. Campbell and associates have purchased the Cherokee National Bank of Tahlequah, I. T.

It is reported that the Mississippi Bond & Investment Co. of Memphis, Tenn., will file an amended charter for the purpose of increasing the capital from \$25,000 to \$50,000.

The Bessemer State Bank of Bessemer, Ala., is reported to have increased its capital from \$30,000 to \$75,000. The officers are: W. K. Hollingsworth, president; W. H. Porter, vice-president, and E. A. Sheller, cashier.

#### Diversity for Dinner.

It surely seems that anyone, even the most exacting, should find just what he wants on a Burlington Route dining car when it is understood that the bills of fare for the evening meals average 52 dishes and table drinks. Some cost only 10 cents and none cost any more than in a good restaurant. It is a remarkable service—remarkable even on such elegant trains as those the Burlington is operating between Chicago, St. Louis, St. Paul, Minneapolis, Omaha, Denver, St. Joseph and Kansas City. Inquiries and requests for time-

## TABLE OF CONTENTS.

EDITORIAL:	Page
What Others Are Saying.....	447
Rhodesian Yarns.....	447
The Chattanooga Conference.....	447
For Trade School.....	448
The Mississippi's Fertility.....	448
Red Tape in Contracts.....	448
Record-Breaking Car Contracts.....	448
A Contemporary Astray.....	448
Florida Phosphate Lands.....	449
Packing in Kentucky.....	449
Southern Steel.....	449
Journalistic.....	449
To Advance Texas.....	449
The Cotton Movement.....	449
Atlanta—Southern Industrial Exposition—1910.....	449
Quarantine and Immigration.....	450
To Improve Tennessee River.....	450
Southern Labor Needs.....	450
Plea for Conservative Dealing With Railroads.....	451
Natural Gas in Louisiana.....	451
Kentucky-Tennessee Oil.....	452
A New England View of the South.....	452
Export Markets for Southern Coal.....	453
American Mining Congress at El Paso.....	453
To Grow Fruit in Alabama.....	454
Nashville's Solid Growth.....	454
To Advertise Texas.....	455
Another Southern Light That Failed.....	455
Reclamation of the St. Francis Valley.....	457
For Alabama's Progress.....	458
Alabama Iron Interests.....	458
MINING:	458
Additional Coke Ovens.....	458
Constructing Furnace.....	458
Georgia Ore Land Sold.....	458
To Purchase Coal Lands.....	458
Deal in Mining Properties.....	458
RAILROADS:	459
Progress on the "Orient".....	459
West Texas Northern.....	459
North Carolina Connecting Railway.....	459
Growth of Texas Railroads.....	459
Eddy Lake & Northern.....	459
New Oklahoma Line.....	459
New Equipment.....	459
Pea River Valley & Gulf.....	459
Jasper & Eastern.....	459
Liberty-White Extension.....	459
South & Western.....	459
Street Railway Deal at Montgomery.....	459
New Line for Tennessee.....	459
Railroad Notes.....	459
Fertilizer Plant Completed.....	459
MECHANICAL:	460
New Hand Elevator (Illus.).....	460
High-Speed Reinforced Concrete Construction (Illus.).....	460
Blasting in Quarries (Illus.).....	460
A New Southern Building (Illus.).....	461
A New Steamship Company.....	461
TEXTILES:	462
Union Mills Reorganization.....	462
National Hosiery Mill.....	462
The Walterboro Cotton Mills.....	462
The Jackson Mills.....	462
The South Atlantic Waste Co.....	462
A 5000-Spindle Mill.....	462
Textile Notes.....	462
LUMBER:	462
For White Labor.....	462
Timber Properties Purchased.....	462
At Pensacola.....	462
A Crate Factory Needed.....	462
Lumber at Liverpool.....	462
Lumber Notes.....	462
FOREIGN LETTERS:	462
Trade With Bremen.....	462
Business in Nicaragua.....	462
CONSTRUCTION DEPARTMENT:	463
Baltimore Building Notes.....	463
New Enterprises.....	463
Building Notes.....	467
Railroad Construction.....	468
Machinery Wanted.....	469
Mexico.....	470
Industrial Notes from Atlanta.....	470
Industrial News of Interest.....	471
Trade Literature.....	472
The Iron and Metal Trades.....	474
FINANCIAL NEWS:	474
Review of the Baltimore Market.....	474
Securities at Baltimore.....	474
Southern Cotton-Mill Stocks.....	474
American Cotton Oil Report.....	475
Bank Reports.....	475
A Trust-Company Deal.....	475
The Bankers' Encyclopedia.....	475
New Corporations.....	476
Financial Notes.....	476

tables may be addressed to P. S. Eustis, passenger traffic manager, Chicago. advt.

#### Resumption Through Pullman Service to New Orleans via Southern Railway.

Southern Railway announces complete resumption of daily through Pullman car service between the East and New Orleans on trains 35 and 36, 37 and 38, 41 and 42. Also sale of tickets to all points in Texas, Mexico and California reached through New Orleans, Shreveport and Memphis. Southern Railway office, 119 East Baltimore street. +

#### Factory Proposition.

Denison, Texas, offers two-story frame factory building, 21,250 square feet floor space, divided into three sections, all located on side-track, and nearly new 250-horse-power engine and boiler. Stock is good proposition taken in lieu of buildings and engine on reasonable valuation. Additional ground on same terms if desired. Best of railroad facilities, plenty of timber, good water and excellent location. Denison is head of navigation on Red river. Further information gladly furnished. W. B. Carnes, secretary Board of Trade. advt.

Page	
447	447
447	447
447	447
448	448
448	448
448	448
448	448
449	449
449	449
449	449
449	449
449	449
449	449
on—	449
449	449
450	450
450	450
Rail-	
451	451
451	451
452	452
452	452
453	453
454	454
454	454
455	455
455	455
455	455
457	457
458	458
458	458

458

460

462

462

462  
462

474  
474  
475  
475  
475  
475  
475  
475  
476  
476

Eustis,

advt.  
Ser-  
thera  
complete  
an ear  
v Or-  
38, 41  
points  
reached  
and  
, 119

frame floor, all 7 250-ock in ddings Addi- sired. 7 tim- ation. Red fur- ard of